TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	**B02.0120220317111844_04**	**This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01**

1. Motherhub Summary

Source TBM/Bin at Pivot:	1	Source Geological Domain:	1
Approx. Source Tunnel Chainage From:	115	Approx. Source Tunnel Chainage To:	117
Rings From:	49	Rings To:	50
Foaming Agent:	TamSoil 287AC	Water Source:	Potable (City West Water)
For BSF Holding Bay No:	B02.01	Start of Filling From (Time / date)	01/03/2022
Tonnes Put in Holding Bay No:	7229.07	Finish of Filling (Time / Date)	05/03/2022
Equivalent Volume (LCM):	4000	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM):	1: 70.18	Equivalent Volume (BCM)	382.42

2. Agon Spoil Classification Decision

Spoil Categorisation Decision (State Yes or No in each Row)	
NPIW Containment - 2020/476(SO 9042848)	Yes
NPIW Landfill - 2019/404 (SO9038429)	Yes
PIW-Category C - 2019/405 (SO9038429)	No
PIW-Category B - 2019/406 (SO9038429)	No
PIW-Category A	No

3. Agon Spoil Classification Assessment

3.1 Applicable Samples

Table 3.1 - 1 lists the applicable sample numbers for this spoil. These have been determined from:

- The date / time bay filling was started
- The date / time bay filling was finished
- The ID of the first truck that deposited spoil in the bay and the date / time that it was filled at Pivot
- The ID of the last truck that deposited spoil in the bay and the date / time it was filled at Pivot
- The sample ID that was associated with the first truck – noting that a time window to be associated with each sample is half the time interval between its sampling time and the time of the preceding and the following samples. For example, is samples were collected at 8am, noon and 4 pm, the time window for the noon sample is between 10 am and 2 pm. That is this sample “belongs” to all truck loaded in this time window

Table 3.1 - Applicable Sample ID's

Table 3.1 - 1 Applicable Sample ID's

Applicable Spoil Sample ID's		
SX_OB_20220305_00_02_SS_Primary_ALS	SX_OB_20220303_16_19_SS_Duplicate_EUF	SX_OB_20220302_12_07_SS_Primary_EUF
SX_OB_20220304_20_09_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Triplicate_ALS	SX_OB_20220302_12_11_SS_Primary_ALS
SX_OB_20220304_16_09_SS_Duplicate_EUF	SX_OB_20220303_12_23_SS_Primary_ALS	SX_OB_20220302_04_06_SS_Primary_ALS
SX_OB_20220304_16_17_SS_Primary_ALS	SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Primary_ALS
SX_OB_20220304_16_09_SS_Triplicate_ALS	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220302_04_02_SS_Primary_EUF
SX_OB_20220304_08_22_SS_Triplicate_EUF	SX_OB_20220303_16_19_SS_Primary_EUF	SX_OB_20220302_00_06_SS_Primary_EUF
SX_OB_20220304_08_24_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF	SX_OB_20220302_00_01_SS_Primary_ALS
SX_OB_20220304_08_22_SS_Duplicate_ALS	SX_OB_20220302_16_07_SS_Triplicate_ALS	SX_OB_20220301_20_10_SS_Primary_ALS
SX_OB_20220304_12_11_SS_Primary_EUF	SX_OB_20220302_19_58_SS_Primary_EUF	SX_OB_20220301_20_04_SS_Primary_EUF
SX_OB_20220304_12_16_SS_Primary_ALS	SX_OB_20220302_23_54_SS_Primary_ALS	SX_OB_20220301_16_31_SS_Duplicate_EUF
SX_OB_20220304_16_09_SS_Primary_EUF	SX_OB_20220303_03_55_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Triplicate_ALS
SX_OB_20220304_08_22_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220301_16_28_SS_Primary_ALS
SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220303_08_08_SS_Duplicate_ALS	SX_OB_20220301_16_31_SS_Primary_EUF
SX_OB_20220304_04_04_SS_Primary_ALS	SX_OB_20220303_08_09_SS_Triplicate_EUF	SX_OB_20220301_12_04_SS_Primary_ALS
SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220302_16_04_SS_Primary_ALS	SX_OB_20220301_12_02_SS_Primary_EUF
SX_OB_20220304_00_02_SS_Primary_ALS	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220301_08_53_SS_Duplicate_ALS
SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Duplicate_ALS	SX_OB_20220301_08_53_SS_Triplicate_EUF
SX_OB_20220303_20_12_SS_Primary_ALS	SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220301_09_00_SS_Primary_EUF
SX_OB_20220303_16_24_SS_Primary_ALS	SX_OB_20220302_08_19_SS_Primary_EUF	SX_OB_20220301_08_53_SS_Primary_ALS
Total Sample Numbers	57	Ratio Acceptable
Primary Sample Numbers	41	Yes
Spoil Volume in Bay	4000 m^3	
Volume: Sample Number Ratio (Samples per LCM)	1: 70.18	

3.2 Data Quality Compliance with SAQP

Table 3.2-1 evaluates the compliance of the data quality for this spoil – by reference to the criteria in the SAQP (Yes / No).

Table 3.2 - 1 Evaluation of Quality of Data for this Spoil

DQI	Field Consideration	Laboratory Consideration	Overall Data Quality Acceptability
Precision	Yes	Yes	Yes
Accuracy	Yes	Yes	Yes
Representativeness	Yes	Yes	Yes
Completeness	Yes	Yes	Yes
Comparability	Yes	Yes	Yes

3.3 Selection of the Spoil Sample Testing Regime

Table 3.3 - 1 Selection of the Spoil Sample Testing Regime

	(State Yes or No in each Row)
A. Is testing all spoil samples taken required for spoil in this Holding Bay, because prior to this Holding Bay, less than 10 Holding Bays of spoil have been tested from this Domain If the answer is Yes, go to E. If the answer is No, go to B.	**Yes**
B. If the answer to A is No (i.e., 10 or more Holding Bays of spoil have been tested from this Domain), do trends in the maximum data values from the previous 10 bays indicate that results are trending at <75% of the containment criteria? If the answer is Yes, go to C. If the answer is No, go to D.	**NA**
C. If the answer to B is Yes, then was **testing** of spoil for this Holding Bay reduced to two primary samples per bay plus QC samples (Minimum Testing Regime) as allowed by the SAQP (See SAQP Section 6.2.7)?	**NA**
D. If the answer to B is No, then was the default testing regime implemented for all samples collected for the spoil in this Holding Bay (as required by the SAQP)?	**NA**
E. Based on the answers to Questions A to D above, was the default testing regime (as defined in the SAQP) applied to the spoil in this Holding Bay?	**Yes**
F. Based on the answers to Questions A to D above, was the Minimum testing Regime (as defined in the SAQP) applied to the spoil in this Holding Bay?	**No**

3.4 Spoil Compliance with SAQP Criteria for Containment Cell

Table 3.4 - 2 Spoil Compliance with SAQP Criteria for Containment Cell

Need for IWRG 621.1 or 655.1 Testing	
A. Is Spoil in this Holding Bay from a Zone of Exception or Anomalous and required testing for IWRG 621.1?	**No**
B. Is IWRG 621.1 testing required for spoil in this Holding Bay, because prior to this Holding Bay, less than 10 Holding Bays of spoil have been tested from this Domain?	**Yes**
C. Is IWRG 621.1 testing required for spoil in this Holding Bay, because the moving 95% UCL values for the previous 10 consecutive Holding Bays of spoil from this Domain are not below TC0 ?	**No**
D. Is testing pursuant to IWRG 655.1 required for spoil in this Holding Bay, because the spoil comes from Exception Zone 3 (See SAQP Section 5.4) ?	**No**
E. Has spoil testing for IWRG 621.1 Parameters been triggered by results of spoil water tests for previous Holding Bays of spoil from this geological domain?	**No**
Outcome from IWRG 621.1 testing (if needed)	
F. If Yes to one or more Questions A, B, C or E, (and not NOC< applicable background concentrations) then do test results for IWRG 621.1 (see Table 3.4-2) permit NPIW Containment as a spoil Classification Outcome? If no to all of Questions A, B, C and E, then respond NA to this question.	**Yes**
Outcome from IWRG 655.1 testing (if needed)	
G. If Yes to Questions D, then do test results for IWRG 655.1 (see Table 3.4-3) permit NPIW Containment as a spoil Classification Outcome? If no to Question D, respond NA to this question	**NA**
Outcome from PFAS Testing	
H. Do test results for PFAS (see Table 3.4-4 below) permit NPIW Containment as a spoil Classification Outcome?	**Yes**
If Yes to either or both of Question E or F, then Spoil is Not Suitable for Containment; Go to Section 3.5. Otherwise, it is Suitable for Containment	
Notes: 1. Criteria taken from EPA Grandfathered Classifications for TBM Spoil (2020/476(SO 9042848)), and from the EPA approved EMP for Hi Quality's Containment Cell	

Table 3.4 - 2 IWRG 621.1 Parameter Concentration Statistics & Spoil Suitability for Containment

IWRG 621.1 Exceedance Test Results											
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
Arsenic	mg/kg	2	41	1: 70.18	41	15	23.8	25.29	40	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 3.6)
Copper	mg/kg	5	41	1: 70.18	41	50	66.66	69.96	110	100	NPIW-Containment
Chromium (Hexavalent)	mg/kg	1	41	1: 70.18	6	<0.5	0.7	0.718	1.1	1	NPIW-Containment
Nickel	mg/kg	5	41	1: 70.18	41	128	177.2	186.7	260	60	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 3.6)
Fluoride	mg/kg	100	41	1: 70.18	36	<100	216.7	229.5	630	450	NPIW-Containment

Table 3.4 – 3 IWRG 655.1 (WASS) Parameter Concentration Statistics & Spoil Suitability for Containment

IWRG 655.1 Test Results											
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
pHF	pH									5	
pHFox	pH									5	
Delta pH										2	
%S	%									0.03%	
Mol H+ /tonne	Mol/ tonne									18	

Table 3.4 - 4 PFAS Parameter Concentrations & Spoil Suitability for Containment

PFAS Test Results

Chemical	Unit	LOR	No. of primary samples	No > LOR	Min	Mean	95% UCL on Mean	Max	Upper Limiting Criteria for NPIW Containment	Spoil Category for PFAS
Total PFAS Concentrations										
Total PFOS	ug/kg	5	41	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	41	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	41	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations										
PFOA	ug/L	0.01	41	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	41	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations										
PFOA	ug/L	0.01	41	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	41	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment

3.5 Waste Classification for Spoil Not Suitable for Containment Cell

This Section 3.5 and the Tables 3.5-1 to 3.5-3 only apply if the spoil is classified in Section 3.4 as not suitable for the Containment Cell. If the spoil is classified in Section 3.4 as not suitable for the Containment Cell, then Tables 3.5-1 and 3.5-2 contain no data and no assessment.

Table 3.5 - 1 below contains the statistics for IWRG 621.1 Parameter concentrations, and Agon’s assessment of their implications for the spoil waste category

Table 3.5 - 2 below contains the statistics for IWRG 655.1 Parameter concentrations, and Agon’s assessment of their implications for the spoil waste category

Table 3.5 - 3 below contains the statistics for PFAS concentration, and Agon’s assessment of their implications for the spoil waste category

Table 3.5 - 1 IWRG 621.1 Parameter Concentration Statistics & Waste Classifications

IWRG 621.1 Exceedance Test Results													
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW	Limiting Criteria for Cat C	Limiting Criteria for Cat B	Comment
Arsenic	mg/kg												
Copper	mg/kg												
Chromium (Hexavalent)	mg/kg												
Nickel	mg/kg												
Fluoride	mg/kg												

TBM Spoil Waste Categorisation Report

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Table 3.5 – 2 IWRG 655.1 (WASS) Parameter Concentration Statistics & Waste Classification

IWRG 655.1 Test Results											
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
pHF	pH									5	
pHFox	pH									5	
Delta pH										2	
%S	%									0.03%	
Mol H+ /tonne	Mol/ tonne									18	

Table 3.5 - 3 PFAS Parameter Concentrations and Waste Classifications

PFAS Test Results													
Chemical	Unit	LOR	No. of primary samples	No > LOR	Min	Mean	95% UCL on Mean	Max	Upper Limiting Criteria for NPIW Containment	Upper Limiting Criteria for NPIW Landfill	Upper Limiting Criteria for PIW Cat C	Upper Limiting Criteria for PIW Cat B	Spoil Category for PFAS
Total PFAS Concentrations													
Total PFOS	ug/kg												
Total PFOA	ug/kg												
Total PFHxS	ug/kg												
ASLP (pH= 5) PFAS Concentrations													
PFOA	ug/L												
PFOS+PFHxS	ug/L												
ASLP (pH= 7) PFAS Concentrations													
PFOA	ug/L												
PFOS+PFHxS	ug/L												

4. Comments and Limitations

Comments and Limitations	
1.	Naturally Occurring Chemicals listed in IWRG 621.1 that are within the Background range despite being reported at concentrations that would otherwise categorise the material as PIW comprise: 1. Technical discussion around the naturally occurring metal concentrations found in soils beneath the WGTP is detailed in *Golder (2017b) – Technical Report B, Appendix E – Environmental characterisation of spoil (natural soil and rock).* The report indicates that elevated metals (including arsenic, nickel, copper, chromium (CrVI), zinc and mercury) were considered to be associated with natural enrichment instead of anthropogenic contamination. a. **Arsenic** – *Golder (2017b) – Technical Report B, Appendix E* section 6.2 *Arsenic enrichment in the residual soil of the upper Older Volcanics (Tvo1)* found that while the soil of the upper Older Volcanics sub-unit contains arsenic, the arsenic is not characteristic of the wider sub unit (i.e the rock) or the lower sub-unit (soil or rock). The concentration of arsenic therefore appears to be related to the chemical and biological weather of the unit over time. This is further supported by: i. The residual soil of the sub-unit being characterised by iron-oxide staining and containing goethite. Goethite is an iron oxyhydroxide mineral, which can contain elevated concentrations of arsenic. Golder therefore concluded that based on the broad vertical distribution of arsenic and the presence of arsenic throughout the greater project area, arsenic results in Upper Older Volcanics soil are not likely to be associated with anthropogenic contamination. b. **Nickel** – *Golder (2017b) – Technical Report B, Appendix E* section 6.3 *Nickel enrichment within the upper Older Volcanics* found that i. Nickel is known to be enriched within olivine and pyroxene basalt minerals, leading to nickel enrichment of soils weathered from basalt (Martini and Chesworth, 2013). ii. The reported mean nickel concentrations within the Older Volcanics were comparable to results reported within soils derived from basalt in Auckland and basalt rock of Finland (ARC, 2001; Koljonen, 1992), Older Volcanics observed in the Melbourne Metro Project (Golder, 1026a) and Newer Volcanics basalt of the Westenra Plains (Birch, 2003). iii. Enriched nickel concentrations corresponded with enriched cobalt (all units) and iron (except Tvo2 soil) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

	iv. Enriched nickel concentrations also corresponded with enriched copper (Tvo2 soil and rock) and zinc (all units) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination. Golder therefore concluded that the nickel is likely associated with geochemical enrichment rather than added contamination. The Golder study found that based on review of the depth, site history and the geochemical association of elements, the reported elevated concentrations of arsenic and nickel are considered representative of geogenic conditions and are not expected to be associated with contamination.
2.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes
3.	This report has been prepared in accordance with industry recognised standards and procedures current at the time of the work. The report presents the results of the assessment based on the quoted scope of works (unless otherwise agreed in writing) for the specific purposes of the engagement by the Client. No warranties expressed or implied, are offered to any third parties and no liability will be accepted for use of this report by third parties.
4.	All information provided by third parties has been assumed to be correct and complete. Agon does not assume any liability for misrepresentation of information by third parties or for matters not visible, accessible or present on the subject site.
5.	Opinions and judgements expressed herein are based on Agon’s understanding of current regulatory standards and should not be construed as legal opinions. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties other than those listed above.
6.	This report should be read in full.

5. Attachments

ATTACHMENT A: TABULATED RESULTS

ATTACHMENT B: 95% UCL AVE CALCULATIONS

ATTACHMENT C: QUALITY ASSURANCE / QUALITY CONTROL ASSESSMENT

ATTACHMENT D: LABORATORY CERTIFICATES

ATTACHMENT A: TABULATED RESULTS

Table 1 - Tabulated Results

	Arsenic		Cadmium		Copper	
	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL	2	0.001	0.4	0.0002	5	0.001
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold						
EPA Victoria IWRG621 PIW Category B Leached Upper Limits		2.8		0.8		800
EPA Victoria IWRG621 PIW Category B Upper Limits	2,000		400		20,000	
EPA Victoria IWRG621 PIW Category C Leached Upper Limits		0.7		0.2		200
EPA Victoria IWRG621 PIW Category C Upper Limts	500		100		5,000	
EPA Victoria IWRG621 NPIW Upper Limits	20		3		100	

Location Code	Field ID	Sample Code	Date	Matrix Description	Lab Report Number	Lab Name	Sample Type	Parent Sample	Arsenic mg/kg	Arsenic mg/L	Cadmium mg/kg	Cadmium mg/L	Copper mg/kg	Copper mg/L
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	EM2203621002	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Field_D	EM2203621001	23		<1		54	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	EM2203621010	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Field_D	EM2203621009						
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	EM2203621001	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		25		<1		57	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	EM2203621009	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	M22-Ma04130	1/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203621001	28		<0.4		60	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	M22-Ma04137	1/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203621001						
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	M22-Ma04144	1/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203621009						
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	M22-Ma04131	1/03/2022	Domain 1	867796	MGT	Normal		27		<0.4		78	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	M22-Ma04138	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	M22-Ma04145	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	M22-Ma04132	1/03/2022	Domain 1	867796	MGT	Normal		30		<0.4		60	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	M22-Ma04139	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	M22-Ma04146	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	EM2203621003	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		16		1		67	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	EM2203621011	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	EM2203621005	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		29		1		56	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	EM2203621013	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	M22-Ma04133	1/03/2022	Domain 1	867796	MGT	Field_D	M22-Ma04134	24		<0.4		69	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	M22-Ma04140	1/03/2022	Domain 1	867796	MGT	Field_D	M22-Ma04141						
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	M22-Ma04147	1/03/2022	Domain 1	867796	MGT	Field_D	M22-Ma04148						
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	M22-Ma04134	1/03/2022	Domain 1	867796	MGT	Normal		20		<0.4		72	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	M22-Ma04141	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	M22-Ma04148	1/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	EM2203621004	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	21		<1		64	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	EM2203621012	1/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148						
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	M22-Ma04105	1/03/2022	Domain 1	867790	MGT	Normal		40		<0.4		62	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	M22-Ma04108	1/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	M22-Ma04111	1/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	EM2203621006	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		19		1		70	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	EM2203621014	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	EM2203621007	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		26		1		50	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	EM2203621015	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	M22-Ma04106	2/03/2022	Domain 1	867790	MGT	Normal		25		<0.4		64	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	M22-Ma04109	2/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	M22-Ma04112	2/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	M22-Ma04107	2/03/2022	Domain 1	867790	MGT	Normal		28		<0.4		54	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	M22-Ma04110	2/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	M22-Ma04113	2/03/2022	Domain 1	867790	MGT	Normal							
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	EM2203621008	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal		26		<5		66	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	EM2203621016	2/03/2022	Domain 1	EM2203621	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	EM2203634001	2/03/2022	Domain 1	EM2203634	ALSE-Melbourne	Field_D	EM2203634002	23		1		68	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	EM2203634003	2/03/2022	Domain 1	EM2203634	ALSE-Melbourne	Field_D	EM2203634004						
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	EM2203634002	2/03/2022	Domain 1	EM2203634	ALSE-Melbourne	Normal		19		<5		63	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	EM2203634004	2/03/2022	Domain 1	EM2203634	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	M22-Ma04135	2/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203634002	39		<0.4		96	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	M22-Ma04142	2/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203634002						
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	M22-Ma04149	2/03/2022	Domain 1	867796	MGT	Interlab_D	EM2203634004						
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	M22-Ma04136	2/03/2022	Domain 1	867796	MGT	Normal		27		<0.4		110	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	M22-Ma04143	2/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	M22-Ma04150	2/03/2022	Domain 1	867796	MGT	Normal							
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	M22-Ma07393	2/03/2022	Domain 1	868276	MGT	Normal		29		0.6		86	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	M22-Ma07398	2/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	M22-Ma07403	2/03/2022	Domain 1	868276	MGT	Normal							

									Arsenic		Cadmium		Copper	
									mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	EM2203824001	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal		19		<1		57	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	EM2203824005	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	EM2203824002	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal		18		<1		51	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	EM2203824006	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	M22-Ma07395	2/03/2022	Domain 1	868276	MGT	Field_D	M22-Ma07394	19		<0.4		70	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	M22-Ma07400	2/03/2022	Domain 1	868276	MGT	Field_D	M22-Ma07399						
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	M22-Ma07405	2/03/2022	Domain 1	868276	MGT	Field_D	M22-Ma07404						
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	M22-Ma07394	2/03/2022	Domain 1	868276	MGT	Normal		27		<0.4		79	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	M22-Ma07399	2/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	M22-Ma07404	2/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	EM2203824003	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	20		<1		64	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	EM2203824007	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404						
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	M22-Ma07396	2/03/2022	Domain 1	868276	MGT	Normal		20		<0.4		63	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	M22-Ma07401	2/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	M22-Ma07406	2/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	EM2203824004	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal		21		<1		59	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	EM2203824008	2/03/2022	Domain 1	EM2203824	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	M22-Ma07397	3/03/2022	Domain 1	868276	MGT	Normal		21		<0.4		67	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	M22-Ma07402	3/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	M22-Ma07407	3/03/2022	Domain 1	868276	MGT	Normal							
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	EM2203659001	3/03/2022	Domain 1	EM2203659	ALSE-Melbourne	Normal		26		<1		61	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	EM2203659003	3/03/2022	Domain 1	EM2203659	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	EM2203659002	3/03/2022	Domain 1	EM2203659	ALSE-Melbourne	Field_D	EM2203659001	19		<1		52	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	EM2203659004	3/03/2022	Domain 1	EM2203659	ALSE-Melbourne	Field_D	EM2203659003						
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	M22-Ma07385	3/03/2022	Domain 1	868272	MGT	Interlab_D	EM2203659001	23		<0.4		71	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	M22-Ma07386	3/03/2022	Domain 1	868272	MGT	Interlab_D	EM2203659001						
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	M22-Ma07387	3/03/2022	Domain 1	868272	MGT	Interlab_D	EM2203659003						
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	EM2203882001	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		17		<1		57	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	EM2203882009	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	M22-Ma09941	3/03/2022	Domain 1	868643	MGT	Normal		19		<0.4		66	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	M22-Ma09950	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	M22-Ma09959	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	M22-Ma09942	3/03/2022	Domain 1	868643	MGT	Normal		20		<0.4		61	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	M22-Ma09951	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	M22-Ma09960	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	M22-Ma09944	3/03/2022	Domain 1	868643	MGT	Field_D	M22-Ma09943	27		<0.4		77	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	M22-Ma09953	3/03/2022	Domain 1	868643	MGT	Field_D	M22-Ma09952						
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	M22-Ma09962	3/03/2022	Domain 1	868643	MGT	Field_D	M22-Ma09961						
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	M22-Ma09943	3/03/2022	Domain 1	868643	MGT	Normal		23		<0.4		70	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	M22-Ma09952	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	M22-Ma09961	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	EM2203882003	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	11		<1		30	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	EM2203882011	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961						
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	EM2203882002	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		25		<1		50	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	EM2203882010	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	M22-Ma09945	3/03/2022	Domain 1	868643	MGT	Normal		21		<0.4		69	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	M22-Ma09954	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	M22-Ma09963	3/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	EM2203882004	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		24		<1		53	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	EM2203882012	3/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	M22-Ma09946	4/03/2022	Domain 1	868643	MGT	Normal		25		<0.4		75	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	M22-Ma09955	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	M22-Ma09964	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	EM2203882005	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		20		<1		56	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	EM2203882013	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	M22-Ma09947	4/03/2022	Domain 1	868643	MGT	Normal		25		<0.4		69	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	M22-Ma09956	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	M22-Ma09965	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	EM2203882006	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		21		<1		59	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	EM2203882014	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	EM2203882008	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Field_D	EM2203882007	21		<1		63	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	EM2203882016	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Field_D	EM2203882015						
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	EM2203882007	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal		20		<1		54	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	EM2203882015	4/03/2022	Domain 1	EM2203882	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	M22-Ma09948	4/03/2022	Domain 1	868643	MGT	Interlab_D	EM2203882007	21		<0.4		66	

									Arsenic		Cadmium		Copper	
									mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	M22-Ma09957	4/03/2022	Domain 1	868643	MGT	Interlab_D	EM2203882007						
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	M22-Ma09966	4/03/2022	Domain 1	868643	MGT	Interlab_D	EM2203882015						
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	M22-Ma09949	4/03/2022	Domain 1	868643	MGT	Normal		22		<0.4		83	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	M22-Ma09958	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	M22-Ma09967	4/03/2022	Domain 1	868643	MGT	Normal							
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	M22-Ma11105	4/03/2022	Domain 1	868800	MGT	Normal		26		<0.4		71	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	M22-Ma11110	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	M22-Ma11115	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	EM2203825001	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal		19		<1		65	
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	EM2203825005	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	M22-Ma11107	4/03/2022	Domain 1	868800	MGT	Field_D	M22-Ma11106	19		<0.4		62	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	M22-Ma11112	4/03/2022	Domain 1	868800	MGT	Field_D	M22-Ma11111						
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	M22-Ma11117	4/03/2022	Domain 1	868800	MGT	Field_D	M22-Ma11116						
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	M22-Ma11106	4/03/2022	Domain 1	868800	MGT	Normal		27		<0.4		80	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	M22-Ma11111	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	M22-Ma11116	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	EM2203825002	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	14		<1		59	
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	EM2203825006	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116						
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	EM2203825003	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal		15		<1		51	
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	EM2203825007	4/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal							
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	M22-Ma11108	4/03/2022	Domain 1	868800	MGT	Normal		19		<0.4		70	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	M22-Ma11113	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	M22-Ma11118	4/03/2022	Domain 1	868800	MGT	Normal							
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	EM2203825004	5/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal		18		<1		57	
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	EM2203825008	5/03/2022	Domain 1	EM2203825	ALSE-Melbourne	Normal							

Statistics

Number of Results	**57**	**1**	**57**	**1**	**57**	**1**
Number of Detects	**57**	**1**	**6**	**0**	**57**	**1**
Minimum Concentration	**11**	**0.02**	**<0.4**	**<0.0002**	**30**	**0.036**
Minimum Detect	**11**	**0.02**	**0.6**	**ND**	**30**	**0.036**
Maximum Concentration	**40**	**0.02**	**<5**	**<0.0002**	**110**	**0.036**
Maximum Detect	**40**	**0.02**	**1**	**ND**	**110**	**0.036**
Average Concentration *	**23**		**0.47**		**65**	
Median Concentration *	**21**	**0.02**	**0.5**	**0.0001**	**64**	**0.036**
Standard Deviation *	**5.2**		**0.46**		**12**	
95% UCL (Student's-t) *	**23.88**		**0.57**		**67.48**	
% of Detects	**100**	**100**	**11**	**0**	**100**	**100**
% of Non-Detects	**0**	**0**	**89**	**100**	**0**	**0**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Metals																			
		Chromium (III+VI)		Chromium (hexavalent)		Lead		Mercury		Molybdenum		Nickel		Phosphorus	Selenium		Silver		Tin		Zinc
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		2	0.001	0.5	0.005	5	0.001	0.1	0.0001	2	0.005	2	0.001	0.01	2	0.001	2	0.005	5	0.005	5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits					20		4		0.4		20		8			4		40			
EPA Victoria IWRG621 PIW Category B Upper Limits				2,000		6,000		300		4,000		12,000			200		720				140,000
EPA Victoria IWRG621 PIW Category C Leached Upper Limits					5		1		0.1		5		2			1		10			
EPA Victoria IWRG621 PIW Category C Upper Limts				500		1,500		75		1,000		3,000			50		180		500		35,000
EPA Victoria IWRG621 NPIW Upper Limits				1		300		1		40		60			10		10		50		200
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	93		<1.0		<5		<0.1		<5		133			<5		<2		<10		86
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	98		<1.0		<5		<0.1		<5		157			<5		<2		<10		102
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	120		<1		5.0		<0.1		<5		160			<2		<2		<10		120
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	130		<1		7.2		<0.1		<5		220			<2		<2		<10		160
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	130		<1		5.3		<0.1		<5		160			<2		<2		<10		120
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	104		<1.0		<5		<0.1		<5		164			<5		<2		<10		110
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	104		<1.0		<5		<0.1		<5		139			<5		<2		<10		91
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	94		<1		<5		<0.1		<5		210			<2		<2		<10		130
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	120		<1		<5		<0.1		<5		200			<2		<2		<10		130
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	101		<1.0		<5		<0.1		<5		158			<5		<2		<10		98
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	130		<1		5.6		<0.1		<5		170			<2		<2		<10		120
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	105		<1.0		<5		<0.1		<5		163			<5		<2		<10		106
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	95		<1.0		<5		<0.1		<5		128			<5		<2		<10		84
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	120		<1		<5		<0.1		<5		170			<2		<2		<10		120
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	100		<1		<5		<0.1		<5		140			<2		<2		<10		110
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	108		<1.0		<5		<0.1		<5		172			<5		<2		<10		99
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	114		<1.0		5		<0.1		<5		173			<5		<2		<10		105
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	92		<1.0		<5		<0.1		<5		168			<5		<2		<10		96
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	150		<1		6.6		<0.1		<5		250			<2		<2		<10		170
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	140		<1		5.4		<0.1		<5		260			<2		<2		<10		190
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	130		<1		5.4		<0.1		<5		240			<2		<2		<10		170
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

Table 1 - Tabulated Results

		Metals																			
		Chromium (III+VI)		Chromium (hexavalent)		Lead		Mercury		Molybdenum		Nickel		Phosphorus	Selenium		Silver		Tin		Zinc
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	90		<1.0		<5		<0.1		<5		144			<5		<2		<10		99
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	81		<1.0		<5		<0.1		<5		132			<5		<2		<10		94
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	110		<1		<5		<0.1		<5		200			<2		<2		<10		130
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	110		<1		<5		<0.1		<5		220			<2		<2		<10		200
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	90		<1.0		<5		<0.1		<5		149			<5		<2		<10		120
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	120		<1		5.7		<0.1		<5		170			<2		<2		<10		120
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	92		<1.0		<5		<0.1		<5		145			<5		<2		<10		108
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	110		<1		<5		<0.1		<5		180			<2		<2		<10		120
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	91		<0.5		<5		<0.1		<2		135			<5		<2		<5		94
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	87		<0.5		<5		<0.1		<2		112			<5		<2		<5		79
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	110		<1		<5		<0.1		<5		170			<2		<2		<10		130
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	94		<0.5		<5		<0.1		<2		150			<5		<2		<5		91
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	120		<1		<5		<0.1		<5		190			<2		<2		<10		130
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	110		<1		<5		<0.1		<5		180			<2		<2		<10		120
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	150		<1		6.2		<0.1		<5		230			<2		<2		<10		150
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	130		<1		5.0		<0.1		<5		210			<2		<2		<10		130
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	55		0.5		<5		<0.1		<2		76			<5		<2		<5		49
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	100		1.1		<5		<0.1		<2		149			<5		<2		<5		88
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	140		<1		5.1		<0.1		<5		200			<2		<2		<10		130
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	100		0.5		<5		<0.1		<2		146			<5		<2		<5		95
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	140		<1		5.2		<0.1		<5		200			<2		<2		<10		150
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	101		0.6		<5		<0.1		<2		146			<5		<2		<5		93
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	130		<1		<5		<0.1		<5		200			<2		<2		<10		140
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	90		0.9		<5		<0.1		<2		161			<5		<2		<5		102
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	105		0.6		<5		<0.1		<2		163			<5		<2		<5		106
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	98		0.5		<5		<0.1		<2		142			<5		<2		<5		90
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	120		<1		<5		<0.1		<5		190			<2		<2		<10		130

Table 1 - Tabulated Results

		Metals																			
		Chromium (III+VI)		Chromium (hexavalent)		Lead		Mercury		Molybdenum		Nickel		Phosphorus	Selenium		Silver		Tin		Zinc
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	110		<1		<5		<0.1		<5		230			<2		<2		<10		200
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	140		<1		5.6		<0.1		<5		170			<2		<2		<10		130
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	94		<1.0		<5		<0.1		<5		152			<5		<2		<10		98
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	130		<1		5.6		<0.1		<5		180			<2		<2		<10		120
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	150		<1		5.8		<0.1		<5		210			<2		<2		<10		150
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	69		<1.0		<5		<0.1		<5		182			<5		<2		<10		99
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	86		<1.0		<5		<0.1		<5		129			<5		<2		<10		77
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	140		<1		5.7		<0.1		<5		170			<2		<2		<10		130
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	85		<1.0		<5		<0.1		<5		155			<5		<2		<10		95
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results	57	1	57	1	57	1	57	1	57	1	57	1	1	57	1	57	1	57	1	57
Number of Detects	57	1	7	0	17	1	0	1	0	0	57	1	1	0	0	0	0	0	0	57
Minimum Concentration	55	0.13	0.5	<0.005	5	0.012	<0.1	0.0002	<2	<0.005	76	0.15	4.5	<2	<0.001	<2	<0.005	<5	<0.005	49
Minimum Detect	55	0.13	0.5	ND	5	0.012	ND	0.0002	ND	ND	76	0.15	4.5	ND	ND	ND	ND	ND	ND	49
Maximum Concentration	150	0.13	1.1	<0.005	7.2	0.012	<0.1	0.0002	<5	<0.005	260	0.15	4.5	<5	<0.001	<2	<0.005	<10	<0.005	200
Maximum Detect	150	0.13	1.1	ND	7.2	0.012	ND	0.0002	ND	ND	260	0.15	4.5	ND	ND	ND	ND	ND	ND	200
Average Concentration *	110		0.51		3.4		0.05		2.2		172			1.7		1		4.6		118
Median Concentration *	108	0.13	0.5	0.0025	2.5	0.012	0.05	0.0002	2.5	0.0025	170	0.15	4.5	1	0.0005	1	0.0025	5	0.0025	120
Standard Deviation *	21		0.11		1.5		0		0.58		35			0.76		0		0.96		30
95% UCL (Student's-t) *	114.4		0.533		3.754		0.05		2.364		179.8			1.904		1		4.774		124.3
% of Detects	100	100	12	0	30	100	0	100	0	0	100	100	100	0	0	0	0	0	0	100
% of Non-Detects	0	0	88	100	70	0	100	0	100	100	0	0	0	100	100	100	100	100	100	0

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene		Acenaphthylene		Anthracene		Benz(a)anthracene		Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene		Benzo(b+j)fluoranthene		Benzo(g,h,i)perylene	
		mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL		0.005	0.5	1	0.5	0.001	0.5	0.001	0.5	1	0.5	0.001	0.5	0.5	0.5	0.5	0.001	0.5	0.001	0.5	0.001
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits		1,200															0.004				
EPA Victoria IWRG621 PIW Category B Upper Limits			400													20					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits		300															0.001				
EPA Victoria IWRG621 PIW Category C Upper Limts			100													5					
EPA Victoria IWRG621 NPIW Upper Limits			20													1					
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene		Acenaphthylene		Anthracene		Benz(a)anthracene		Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene		Benzo(b+j)fluoranthene		Benzo(g,h,i)perylene	
		mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	

Table 1 - Tabulated Results

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene		Acenaphthylene		Anthracene		Benz(a)anthracene		Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene		Benzo(b+j)fluoranthene		Benzo(g,h,i)perylene	
		mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**				<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**		<0.5	<1.0	<0.5		<0.5		<0.5		<0.5		<0.5	1.2	0.6	<0.5				<0.5	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene		Acenaphthylene		Anthracene		Benz(a)anthracene		Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene		Benzo(b+j)fluoranthene		Benzo(g,h,i)perylene	
Number of Results		**1**	**28**	**28**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**57**	**57**	**57**	**1**	**29**	**1**	**57**	**1**
Number of Detects		**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**57**	**57**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**0.2**	**<0.5**	**<1**	**<0.5**	**<0.001**	**<0.5**	**<0.001**	**<0.5**	**<1**	**<0.5**	**<0.001**	**<0.5**	**1.2**	**0.6**	**<0.5**	**<0.001**	**<0.5**	**<0.001**	**<0.5**	**<0.001**
Minimum Detect		**0.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.2**	**0.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**0.2**	**<0.5**	**<1**	**<0.5**	**<0.001**	**<0.5**	**<0.001**	**<0.5**	**<1**	**<0.5**	**<0.001**	**<0.5**	**1.2**	**0.6**	**<0.5**	**<0.001**	**<0.5**	**<0.001**	**<0.5**	**<0.001**
Maximum Detect		**0.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.2**	**0.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *			**0.25**	**0.5**	**0.25**		**0.25**		**0.25**		**0.25**		**0.25**	**1.2**	**0.6**	**0.25**		**0.25**		**0.25**	
Median Concentration *		**0.2**	**0.25**	**0.5**	**0.25**	**0.0005**	**0.25**	**0.0005**	**0.25**	**0.5**	**0.25**	**0.0005**	**0.25**	**1.2**	**0.6**	**0.25**	**0.0005**	**0.25**	**0.0005**	**0.25**	**0.0005**
Standard Deviation *			**0**	**0**	**0**		**0**		**0**		**0**		**0**	**0**	**0**	**0**		**0**		**0**	
95% UCL (Student's-t) *			**0.25**	**0.5**	**0.25**		**0.25**		**0.25**		**0.25**		**0.25**	**1.2**	**0.6**	**0.25**		**0.25**		**0.25**	
% of Detects		**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**100**	**0**	**0**	**0**	**0**	**0**	**0**
% of Non-Detects		**0**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**0**	**0**	**100**	**100**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		PAH																			
		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Fluoranthene		Fluorene		Indeno(1,2,3-c,d)pyrene		Naphthalene		Phenanthrene		Pyrene		PAHs (Sum of total)	PAHs (Sum of total)
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL		0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001	0.5	0.001
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																				400	
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																				100	
EPA Victoria IWRG621 NPIW Upper Limits																				20	
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				

		PAH																			
		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Fluoranthene		Fluorene		Indeno(1,2,3-c,d)pyrene		Naphthalene		Phenanthrene		Pyrene		PAHs (Sum of total)	PAHs (Sum of total)
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

		PAH																			
		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Fluoranthene		Fluorene		Indeno(1,2,3-c,d)pyrene		Naphthalene		Phenanthrene		Pyrene		PAHs (Sum of total)	PAHs (Sum of total)
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS			<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5			
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results	29	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1	29	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001	<0.5	<0.001
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25	
Median Concentration *	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005	0.25	0.0005
Standard Deviation *	0		0		0		0		0		0		0		0		0		0	
95% UCL (Student's-t) *	0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25		0.25	
% of Detects	0	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	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		BTEX												TRH							
		Benzene		Ethylbenzene		Toluene		Xylene (o)		Xylene (m & p)		Xylene Total	Xylene Total	C6-C10		C6-C10 (F1 minus BTEX)		C10-C16		C10-C16 (F2 minus Naphthalene)	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.1	1	0.1	1	0.1	1	0.1	1	0.2	2	0.3	3	10	20	10	20	50	50	50	50
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits			400																		
EPA Victoria IWRG621 PIW Category B Upper Limits		16																			
EPA Victoria IWRG621 PIW Category C Leached Upper Limits			100																		
EPA Victoria IWRG621 PIW Category C Upper Limts		4																			
EPA Victoria IWRG621 NPIW Upper Limits		1																			
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				

Table 1 - Tabulated Results

		BTEX												TRH							
		Benzene		Ethylbenzene		Toluene		Xylene (o)		Xylene (m & p)		Xylene Total	Xylene Total	C6-C10		C6-C10 (F1 minus BTEX)		C10-C16		C10-C16 (F2 minus Naphthalene)	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<10		<10		<50		<50	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	

Table 1 - Tabulated Results

		BTEX												TRH							
		Benzene		Ethylbenzene		Toluene		Xylene (o)		Xylene (m & p)		Xylene Total	Xylene Total	C6-C10		C6-C10 (F1 minus BTEX)		C10-C16		C10-C16 (F2 minus Naphthalene)	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.1		<0.1		<0.1		<0.1		<0.2		<0.3		<20		<20		<50		<50	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<0.2		<0.5		<0.5		<0.5		<0.5		<0.5		<20		<20		<50		<50	
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results		57	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1	57	1
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration		<0.1	<10	<0.1	<10	<0.1	<10	<0.1	<10	<0.2	<20	<0.3	<30	<10	<200	<10	<200	<50	<50	<50	<50
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.2	<10	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<20	<0.5	<30	<20	<200	<20	<200	<50	<50	<50	<50
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		0.075		0.15		0.15		0.15		0.17		0.2		9.1		9.1		25		25	
Median Concentration *		0.05	5	0.05	5	0.05	5	0.05	5	0.1	10	0.15	15	10	100	10	100	25	25	25	25
Standard Deviation *		0.025		0.1		0.1		0.1		0.076		0.05		1.9		1.9		0		0	
95% UCL (Student's-t) *		0.0801		0.171		0.171		0.171		0.19		0.21		9.548		9.548		25		25	
% of Detects		0	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	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

								TPH													
		C16-C34		C34-C40		C10-C40 (Sum of total)	C10-C40 (Sum of total)	C6-C9		C10-C14		C15-C28		C29-C36		+C10-C36 (Sum of total)	+C10-C36 (Sum of total)	Aldrin		Dieldrin	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L
EQL		100	100	100	100	50	100	10	20	20	50	50	100	50	100	50	100	0.03	0.0002	0.03	0.0002
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits								2,600								40,000					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts								650								10,000					
EPA Victoria IWRG621 NPIW Upper Limits								100								1,000					
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**																				
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**																				

Table 1 - Tabulated Results

								TPH															
		C16-C34		C34-C40		C10-C40 (Sum of total)	C10-C40 (Sum of total)	C6-C9		C10-C14		C15-C28		C29-C36		+C10-C36 (Sum of total)	+C10-C36 (Sum of total)	Aldrin		Dieldrin	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<100		<100		<50		<10		<50		<100		<100		<50		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	

Table 1 - Tabulated Results

								TPH													
		C16-C34		C34-C40		C10-C40 (Sum of total)	C10-C40 (Sum of total)	C6-C9		C10-C14		C15-C28		C29-C36		+C10-C36 (Sum of total)	+C10-C36 (Sum of total)	Aldrin		Dieldrin	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<100		<100		<100		<20		31		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<100		<100		<100		<20		<20		<50		<50		<50		<0.05		<0.05	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<100		<100		<50		<20		<50		<100		<100		<50		<0.05		<0.05	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

Number of Results	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**
Number of Detects	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**
Minimum Concentration	**<100**	**500**	**<100**	**100**	**<50**	**600**	**<10**	**<200**	**<20**	**<50**	**<50**	**300**	**<50**	**300**	**<50**	**600**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**
Minimum Detect	**ND**	**500**	**ND**	**100**	**ND**	**600**	**ND**	**ND**	**31**	**ND**	**ND**	**300**	**ND**	**300**	**ND**	**600**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<100**	**500**	**<100**	**100**	**<100**	**600**	**<20**	**<200**	**<50**	**<50**	**<100**	**300**	**<100**	**300**	**<50**	**600**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**
Maximum Detect	**ND**	**500**	**ND**	**100**	**ND**	**600**	**ND**	**ND**	**31**	**ND**	**ND**	**300**	**ND**	**300**	**ND**	**600**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**50**		**50**		**38**		**9.1**		**18**		**37**		**37**		**25**		**0.023**		**0.023**	
Median Concentration *	**50**	**500**	**50**	**100**	**50**	**600**	**10**	**100**	**25**	**25**	**25**	**300**	**25**	**300**	**25**	**600**	**0.025**	**0.0001**	**0.025**	**0.0001**
Standard Deviation *	**0**		**0**		**13**		**1.9**		**7.7**		**13**		**13**		**0**		**0.0038**		**0.0038**	
95% UCL (Student's-t) *	**50**		**50**		**40.51**		**9.548**		**19.44**		**40.07**		**40.07**		**25**		**0.0241**		**0.0241**	
% of Detects	**0**	**100**	**0**	**100**	**0**	**100**	**0**	**0**	**2**	**0**	**0**	**100**	**0**	**100**	**0**	**100**	**0**	**0**	**0**	**0**
% of Non-Detects	**100**	**0**	**100**	**0**	**100**	**0**	**100**	**100**	**98**	**100**	**100**	**0**	**100**	**0**	**100**	**0**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Aldrin + Dieldrin		DDD		DDT		4,4-DDE		DDT+DDE+DDD		Endosulfan I		Endosulfan II		Endrin		Endrin ketone		Endrin aldehyde	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL		0.03	0.0002	0.05	0.0002	0.05	0.0002	0.05	0.0002	0.05	0.0002	0.03	0.0002	0.03	0.0002	0.03	0.0002	0.05	0.0002	0.03	0.0002
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits			0.12																		
EPA Victoria IWRG621 PIW Category B Upper Limits		4.8								50											
EPA Victoria IWRG621 PIW Category C Leached Upper Limits			0.03								2										
EPA Victoria IWRG621 PIW Category C Upper Limts		1.2								50											
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

		Aldrin + Dieldrin		DDD		DDT		4,4-DDE		DDT+DDE+DDD		Endosulfan I		Endosulfan II		Endrin		Endrin ketone		Endrin aldehyde	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**	<0.03		<0.05		<0.05		<0.05		<0.05		<0.03		<0.03		<0.03				<0.03	
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	

		Aldrin + Dieldrin		DDD		DDT		4,4-DDE		DDT+DDE+DDD		Endosulfan I		Endosulfan II		Endrin		Endrin ketone		Endrin aldehyde	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.30		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05				<0.05	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				
Statistics																					
Number of Results		**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**29**	**1**	**57**	**1**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.03**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.05**	**<0.0002**	**<0.03**	**<0.0002**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.3**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**0.063**		**0.025**		**0.025**		**0.025**		**0.025**		**0.023**		**0.023**		**0.023**		**0.025**		**0.023**	
Median Concentration *		**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**
Standard Deviation *		**0.06**		**0**		**0**		**0**		**0**		**0.0038**		**0.0038**		**0.0038**		**0**		**0.0038**	
95% UCL (Student's-t) *		**0.076**		**0.025**		**0.025**		**0.025**		**0.025**		**0.0241**		**0.0241**		**0.0241**		**0.025**		**0.0241**	
% of Detects		**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Organochlorine Pesticides																			
		Endosulfan sulphate		chlordane		Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene		Heptachlor		Heptachlor epoxide		a-BHC		b-BHC		d-BHC		g-BHC (Lindane)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL		0.03	0.0002	0.03	0.002	0.03	0.03	0.03	0.0002	0.03	0.0002	0.03	0.0002	0.03	0.0002	0.03	0.0002	0.03	0.0002	0.03	0.0002
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits					0.4						0.12										
EPA Victoria IWRG621 PIW Category B Upper Limits				16						4.8											
EPA Victoria IWRG621 PIW Category C Leached Upper Limits					0.1						0.03										
EPA Victoria IWRG621 PIW Category C Upper Limts				4						1.2											
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

Table 1 - Tabulated Results

		Organochlorine Pesticides																		
		Endosulfan sulphate		chlordane		Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene		Heptachlor		Heptachlor epoxide		a-BHC		b-BHC		d-BHC		g-BHC (Lindane)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.03		<0.03		<0.03	<0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	

		Organochlorine Pesticides																			
		Endosulfan sulphate		chlordane		Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene		Heptachlor		Heptachlor epoxide		a-BHC		b-BHC		d-BHC		g-BHC (Lindane)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.05		<0.1				<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.05		<0.10		<0.03	<0.03	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

Number of Results	**57**	**1**	**57**	**1**	**28**	**28**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<0.03**	**<0.0002**	**<0.03**	**<0.002**	**<0.03**	**<0.03**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**	**<0.03**	**<0.0002**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.05**	**<0.0002**	**<0.1**	**<0.002**	**<0.03**	**<0.03**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**	**<0.05**	**<0.0002**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**0.023**		**0.044**		**0.015**	**0.015**	**0.023**		**0.023**		**0.023**		**0.023**		**0.023**		**0.023**		**0.023**	
Median Concentration *	**0.025**	**0.0001**	**0.05**	**0.001**	**0.015**	**0.015**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**	**0.025**	**0.0001**
Standard Deviation *	**0.0038**		**0.013**		**0**	**0**	**0.0038**		**0.0038**		**0.0038**		**0.0038**		**0.0038**		**0.0038**		**0.0038**	
95% UCL (Student's-t) *	**0.0241**		**0.0468**		**0.015**	**0.015**	**0.0241**		**0.0241**		**0.0241**		**0.0241**		**0.0241**		**0.0241**		**0.0241**	
% of Detects	**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Methoxychlor		Toxaphene		Organochlorine pesticides EPAVic		Other organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol		2,4-Dichlorophenol		2,4,5-Trichlorophenol		2,4,6-Trichlorophenol		2,6-Dichlorophenol		4-chloro-3-methylphenol	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.03	0.0002	0.5	0.005	0.03	0.002	0.03	0.002	0.03	3	0.03	3	0.05	10	0.05	10	0.03	3	0.03	10
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits								50													
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts								10													
EPA Victoria IWRG621 NPIW Upper Limits						1															
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

Table 1 - Tabulated Results

		Methoxychlor		Toxaphene		Organochlorine pesticides EPAVic		Other organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol		2,4-Dichlorophenol		2,4,5-Trichlorophenol		2,4,6-Trichlorophenol		2,6-Dichlorophenol		4-chloro-3-methylphenol	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.03				<0.03		<0.03		<0.03		<0.03		<0.05		<0.05		<0.03		<0.03	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	

Table 1 - Tabulated Results

		Methoxychlor		Toxaphene		Organochlorine pesticides EPAVic		Other organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol		2,4-Dichlorophenol		2,4,5-Trichlorophenol		2,4,6-Trichlorophenol		2,6-Dichlorophenol		4-chloro-3-methylphenol	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.05		<0.5		<0.1		<0.1		<0.5		<0.5		<1		<1		<0.5		<1	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.05				<0.10		<0.03		<0.50		<0.50		<1.00		<1.00		<0.50		<1.00	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

Number of Results	**57**	**1**	**29**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<0.03**	**<0.0002**	**<0.5**	**<0.005**	**<0.03**	**<0.002**	**<0.03**	**<0.002**	**<0.03**	**<3**	**<0.03**	**<3**	**<0.05**	**<10**	**<0.05**	**<10**	**<0.03**	**<3**	**<0.03**	**<10**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.05**	**<0.0002**	**<0.5**	**<0.005**	**<0.1**	**<0.002**	**<0.1**	**<0.002**	**<0.5**	**<3**	**<0.5**	**<3**	**<1**	**<10**	**<1**	**<10**	**<0.5**	**<3**	**<1**	**<10**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**0.023**		**0.25**		**0.044**		**0.033**		**0.21**		**0.21**		**0.42**		**0.42**		**0.21**		**0.41**	
Median Concentration *	**0.025**	**0.0001**	**0.25**	**0.0025**	**0.05**	**0.001**	**0.05**	**0.001**	**0.25**	**1.5**	**0.25**	**1.5**	**0.5**	**5**	**0.5**	**5**	**0.25**	**1.5**	**0.5**	**5**
Standard Deviation *	**0.0038**		**0**		**0.013**		**0.018**		**0.09**		**0.09**		**0.18**		**0.18**		**0.09**		**0.19**	
95% UCL (Student's-t) *	**0.0241**		**0.25**		**0.0468**		**0.0367**		**0.229**		**0.229**		**0.457**		**0.457**		**0.229**		**0.456**	
% of Detects	**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Phenols																			
		Pentachlorophenol		2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol		Tetrachlorophenols		2,3,5,6-Tetrachlorophenol	Cresol Total		4,6-Dinitro-o-cyclohexyl phenol		Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol		2-Methylphenol		2-Nitrophenol	
		mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.2	10	0.05	5	30	10	30	0.03	0.5	0.01	5	100	0.03	1	0.5	3	0.2	3	1	10
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits														320	2,200						
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts														10	560						
EPA Victoria IWRG621 NPIW Upper Limits														1	60						
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

		Phenols																			
		Pentachlorophenol		2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol		Tetrachlorophenols		2,3,5,6-Tetrachlorophenol	Cresol Total		4,6-Dinitro-o-cyclohexyl phenol		Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol		2-Methylphenol		2-Nitrophenol	
		mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.2		<0.05	<5				<0.03			<5		<0.03	<1	<1		<1		<1	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	

Table 1 - Tabulated Results

		Phenols																			
		Pentachlorophenol		2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol		Tetrachlorophenols		2,3,5,6-Tetrachlorophenol	Cresol Total		4,6-Dinitro-o-cyclohexyl phenol		Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol		2-Methylphenol		2-Nitrophenol	
		mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<1			<5		<10			<0.5		<20				<0.5		<0.2		<1	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<1.0		<0.05	<5				<0.03			<20		<1.00	<20	<1		<1		<1	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

Number of Results		57	1	28	57	1	29	1	28	29	1	57	1	28	28	57	1	57	1	57	1
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration		<0.2	<10	<0.05	<5	<30	<10	<30	<0.03	<0.5	<0.01	<5	<100	<0.03	<1	<0.5	<3	<0.2	<3	<1	<10
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<1	<10	<0.05	<5	<30	<10	<30	<0.03	<0.5	<0.01	<20	<100	<1	<20	<1	<3	<1	<3	<1	<10
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		0.43		0.025	2.5		5		0.015	0.25		8.7		0.33	6.6	0.37		0.3		0.5	
Median Concentration *		0.5	5	0.025	2.5	15	5	15	0.015	0.25	0.005	10	50	0.5	10	0.25	1.5	0.1	1.5	0.5	5
Standard Deviation *		0.15		0	0		0		0	0		2.9		0.24	4.6	0.13		0.2		0	
95% UCL (Student's-t) *		0.464		0.025	2.5		5		0.015	0.25		9.322		0.403	8.099	0.401		0.341		0.5	
% of Detects		0	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	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		2,4-Dinitrophenol		3&4-Methylphenol (m&p-cresol)		4-Nitrophenol		Dinoseb		Phenol		Phenols (Total Halogenated)		Phenols (Total Non Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
		mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		5	0.03	0.4	6	5	30	5	100	0.5	3	1	0.01	20	0.1	0.00001	0.0005	0.00001	0.0005	0.00005	0.0005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**															<0.00005		<0.00005		<0.00005	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**															<0.00001		<0.00001		<0.00005	

		2,4-Dinitrophenol		3&4-Methylphenol (m&p-cresol)		4-Nitrophenol		Dinoseb		Phenol		Phenols (Total Halogenated)		Phenols (Total Non Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
		mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<5		<1		<5		<5		<1						<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01

		2,4-Dinitrophenol		3&4-Methylphenol (m&p-cresol)		4-Nitrophenol		Dinoseb		Phenol		Phenols (Total Halogenated)		Phenols (Total Non Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
		mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<5		<0.4		<5		<20		<0.5		<1		<20			<0.005		<0.005		<0.01
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF															<0.00001		<0.00001		<0.00005	
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<5		<1		<5		<20		<1						<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS															<0.00005		<0.00005		<0.00005	

Statistics

Number of Results	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**29**	**1**	**29**	**1**	**115**	**57**	**115**	**57**	**115**	**57**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<5**	**<0.03**	**<0.4**	**<6**	**<5**	**<30**	**<5**	**<100**	**<0.5**	**<3**	**<1**	**<0.01**	**<20**	**<0.1**	**<0.00001**	**<0.0005**	**<0.00001**	**<0.0005**	**<0.00005**	**<0.0005**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<5**	**<0.03**	**<1**	**<6**	**<5**	**<30**	**<20**	**<100**	**<1**	**<3**	**<1**	**<0.01**	**<20**	**<0.1**	**<0.00005**	**<0.005**	**<0.00005**	**<0.005**	**<0.00005**	**<0.01**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**2.5**		**0.35**		**2.5**		**8.7**		**0.37**		**0.5**		**10**		**0.000015**	**0.0021**	**0.000015**	**0.0021**	**0.000025**	**0.0042**
Median Concentration *	**2.5**	**0.015**	**0.2**	**3**	**2.5**	**15**	**10**	**50**	**0.25**	**1.5**	**0.5**	**0.005**	**10**	**0.05**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000025**	**0.005**
Standard Deviation *	**0**		**0.15**		**0**		**2.9**		**0.13**		**0**		**0**		**0.00001**	**0.00086**	**0.00001**	**0.00086**	**0**	**0.0018**
95% UCL (Student's-t) *	**2.5**		**0.381**		**2.5**		**9.322**		**0.401**		**0.5**		**10**		**0.000016292**	**0.0023**	**0.000016292**	**0.0023**	**0.000025**	**0.00457**
% of Detects	**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		0.00001	0.0005	0.00005	0.0005	0.00002	0.0002	0.00005	0.0005	0.00005	0.0005	0.00002	0.0002	0.00005	0.0005	0.00005	0.001	0.00001	0.0002	0.00001	0.0002
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	

		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00005		<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005

Table 1 - Tabulated Results

		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)	
		mg/L	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**	**mg/L**	**mg/kg**
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002	

Statistics

Number of Results		**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.00001**	**<0.0005**	**<0.00005**	**<0.0005**	**<0.00002**	**<0.0002**	**<0.00005**	**<0.0005**	**<0.00005**	**<0.0005**	**<0.00002**	**<0.0002**	**<0.00005**	**<0.0005**	**<0.00005**	**<0.001**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.00005**	**<0.005**	**<0.00005**	**<0.005**	**<0.00005**	**<0.01**	**<0.00005**	**<0.005**	**<0.00005**	**<0.005**	**<0.00005**	**<0.01**	**<0.00005**	**<0.005**	**<0.0001**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**0.000015**	**0.0021**	**0.000025**	**0.0021**	**0.000022**	**0.0041**	**0.000025**	**0.0021**	**0.000025**	**0.0021**	**0.000022**	**0.0041**	**0.000025**	**0.0021**	**0.000037**	**0.0021**	**0.0000074**	**0.0021**	**0.0000074**	**0.0021**
Median Concentration *		**0.000005**	**0.0025**	**0.000025**	**0.0025**	**0.000025**	**0.005**	**0.000025**	**0.0025**	**0.000025**	**0.0025**	**0.000025**	**0.005**	**0.000025**	**0.0025**	**0.000025**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**
Standard Deviation *		**0.00001**	**0.00086**	**0**	**0.00086**	**0.0000061**	**0.0019**	**0**	**0.00086**	**0**	**0.00086**	**0.0000061**	**0.0019**	**0**	**0.00086**	**0.000013**	**0.00077**	**0.0000025**	**0.00092**	**0.0000025**	**0.00092**
95% UCL (Student's-t) *		**0.000016292**	**0.0023**	**0.000025**	**0.0023**	**0.000022816**	**0.00456**	**0.000025**	**0.0023**	**0.000025**	**0.0023**	**0.000022816**	**0.00456**	**0.000025**	**0.0023**	**0.000039115**	**0.00232**	**0.0000078229**	**0.00228**	**0.0000078229**	**0.00228**
% of Detects		**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold

EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits

EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits

EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits

EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts

EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		PFOS/PFOA																			
		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.005	0.00001	0.0002	0.00002	0.0002	0.00001	0.0002
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																0					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																0.00056					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																0.0056					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																0.056					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	

Table 1 - Tabulated Results

		PFOS/PFOA																			
		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002	
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

Table 1 - Tabulated Results

		PFOS/PFOA																			
		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001	
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002	

Statistics

Number of Results	115	57	115	57	115	57	115	57	115	57	115	57	59	29	115	57	115	57	115	57
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.005	<0.00001	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.00002	<0.005	<0.00002	<0.005	<0.00002	<0.005	<0.00002	<0.005	<0.00002	<0.005	<0.00002	<0.005	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.005	<0.00002	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0000074	0.0021	0.0000074	0.0021	0.0000074	0.0021	0.0000074	0.0021	0.0000074	0.0021	0.0000074	0.0021	0.000005	0.0025	0.000005	0.0021	0.000022	0.0021	0.0000074	0.0021
Median Concentration *	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000025	0.0025	0.000005	0.0025
Standard Deviation *	0.0000025	0.00092	0.0000025	0.00092	0.0000025	0.00092	0.0000025	0.00092	0.0000025	0.00092	0.0000025	0.00092	0	0	0	0.00092	0.0000061	0.00092	0.0000025	0.00092
95% UCL (Student's-t) *	0.0000078229	0.00228	0.0000078229	0.00228	0.0000078229	0.00228	0.0000078229	0.00228	0.0000078229	0.00228	0.0000078229	0.00228	0.000005	0.0025	0.000005	0.00228	0.000022816	0.00228	0.0000078229	0.00228
% of Detects	0	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	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		0.00001	0.0002	0.00001	0.005	0.00001	0.0005	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.005	0.00001	0.005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																0					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																0.00007					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																0.0007					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																0.007					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	

Table 1 - Tabulated Results

		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**	<0.00002	<0.0002			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002				
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

Table 1 - Tabulated Results

		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001					

Statistics

Number of Results	**115**	**57**	**59**	**29**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**115**	**57**	**59**	**29**	**59**	**29**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<0.00001**	**<0.0002**	**<0.00001**	**<0.005**	**<0.00001**	**<0.0005**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.00002**	**<0.005**	**<0.00001**	**<0.005**	**<0.00005**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**0.0000074**	**0.0021**	**0.000005**	**0.0025**	**0.000015**	**0.0021**	**0.0000074**	**0.0021**	**0.0000074**	**0.0021**	**0.000005**	**0.0021**	**0.000005**	**0.0021**	**0.000005**	**0.0021**	**0.000005**	**0.0025**	**0.000005**	**0.0025**
Median Concentration *	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**
Standard Deviation *	**0.0000025**	**0.00092**	**0**	**0**	**0.00001**	**0.00086**	**0.0000025**	**0.00092**	**0.0000025**	**0.00092**	**0**	**0.00092**	**0**	**0.00092**	**0**	**0.00092**	**0**	**0**	**0**	**0**
95% UCL (Student's-t) *	**0.0000078229**	**0.00228**	**0.000005**	**0.0025**	**0.000016292**	**0.0023**	**0.0000078229**	**0.00228**	**0.0000078229**	**0.00228**	**0.000005**	**0.00228**	**0.000005**	**0.00228**	**0.000005**	**0.00228**	**0.000005**	**0.0025**	**0.000005**	**0.0025**
% of Detects	**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Sum of PFAS	Sum of PFAS	1,1-dichloroethane		1,1-dichloroethene		1,2,3-trichloropropane		1,2-dichloroethane		1,2-dichloropropane		1,3-dichloropropane		Bromochloromethane		1,1,1,2-tetrachloroethane		Bromodichloromethane	
		mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.00001	0.0002	0.5	1	0.01	1	0.5	1	0.02	1	0.5	1	0.5	1	0.5	1	0.01	1	0.5	1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.00010																			
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.00010																			
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.00010																			
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.00010																			
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.0001																			

		Sum of PFAS	Sum of PFAS	1,1-dichloroethane		1,1-dichloroethene		1,2,3-trichloropropane		1,2-dichloroethane		1,2-dichloropropane		1,3-dichloropropane		Bromochloromethane		1,1,1,2-tetrachloroethane		Bromodichloromethane	
		mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.00001																			
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.00001																			
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.0001																			
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.0001																			
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.00001																			
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.0001																			
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.00001																			
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00001	<0.0002			<0.01				<0.02								<0.01			
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.00001																			
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Table 1 - Tabulated Results

		Sum of PFAS	Sum of PFAS	1,1-dichloroethane		1,1-dichloroethene		1,2,3-trichloropropane		1,2-dichloroethane		1,2-dichloropropane		1,3-dichloropropane		Bromochloromethane		1,1,1,2-tetrachloroethane		Bromodichloromethane	
		mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.00010																			
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.00010																			
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.00010																			
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**		<0.05	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.0001																			
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00010	<0.0500			<0.50				<0.50								<0.50			
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.00010																			

Statistics

Number of Results		**115**	**57**	**29**	**1**	**57**	**1**	**29**	**1**	**57**	**1**	**29**	**1**	**29**	**1**	**29**	**1**	**57**	**1**	**29**	**1**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.00001**	**<0.0002**	**<0.5**	**<10**	**<0.01**	**<10**	**<0.5**	**<10**	**<0.02**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.01**	**<10**	**<0.5**	**<10**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.0001**	**<0.05**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**0.000041**	**0.021**	**0.25**		**0.21**		**0.25**		**0.21**		**0.25**		**0.25**		**0.25**		**0.21**		**0.25**	
Median Concentration *		**0.00005**	**0.025**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**
Standard Deviation *		**0.000018**	**0.0096**	**0**		**0.094**		**0**		**0.092**		**0**		**0**		**0**		**0.094**		**0**	
95% UCL (Student's-t) *		**0.000043449**	**0.0227**	**0.25**		**0.228**		**0.25**		**0.228**		**0.25**		**0.25**		**0.25**		**0.228**		**0.25**	
% of Detects		**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Chlorinated Hydrocarbons																			
		1,1,1-trichloroethane		Chloroform		1,1,2,2-tetrachloroethane		Chloromethane		cis-1,3-dichloropropene		Dibromomethane		Dichloromethane		Hexachlorobutadiene		Other chlorinated hydrocarbons EPAVic		Trichloroethene	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.01	1	0.02	5	0.02	1	0.5	5	0.5	1	0.5	1	0.4	5	0.02	1	0.01	5	0.02	1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																	280				
EPA Victoria IWRG621 PIW Category B Upper Limits																11		50			
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																	70				
EPA Victoria IWRG621 PIW Category C Upper Limts																2.8		10			
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

		Chlorinated Hydrocarbons																			
		1,1,1-trichloroethane		Chloroform		1,1,2,2-tetrachloroethane		Chloromethane		cis-1,3-dichloropropene		Dibromomethane		Dichloromethane		Hexachlorobutadiene		Other chlorinated hydrocarbons EPAVic		Trichloroethene	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220302_12_11_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220302_16_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220302_16_07_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_19_58_SS_Primary_EUF**																				
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220302_23_54_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_03_55_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_08_07_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_08_08_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220303_08_09_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_12_23_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_12_25_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Duplicate_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_16_19_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_16_24_SS_Primary_ALS**																				
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_20_10_SS_Primary_EUF**																				
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220303_20_12_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_00_01_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220304_00_02_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_04_02_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220304_04_04_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220304_08_22_SS_Duplicate_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**	<0.01		<0.02		<0.02								<0.4		<0.02		<0.01		<0.02	
B02.01	**SX_OB_20220304_08_22_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

		Chlorinated Hydrocarbons																			
		1,1,1-trichloroethane		Chloroform		1,1,2,2-tetrachloroethane		Chloromethane		cis-1,3-dichloropropene		Dibromomethane		Dichloromethane		Hexachlorobutadiene		Other chlorinated hydrocarbons EPAVic		Trichloroethene	
		mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L	mg/kg	μg/L
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_22_SS_Triplicate_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_08_24_SS_Primary_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_11_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220304_12_16_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_DUPLICATE_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220304_16_09_SS_Triplicate_ALS**																				
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220304_16_17_SS_Primary_ALS**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220304_20_09_SS_PRIMARY_EUF**																				
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**	<0.50		<0.50		<0.50								<0.5		<0.50		<0.50		<0.50	
B02.01	**SX_OB_20220305_00_02_SS_Primary_ALS**																				

Statistics

Number of Results	**57**	**1**	**57**	**1**	**57**	**1**	**29**	**1**	**29**	**1**	**29**	**1**	**57**	**1**	**57**	**1**	**57**	**1**	**57**	**1**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<0.01**	**<10**	**<0.02**	**<10**	**<0.02**	**<10**	**<0.5**	**<50**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.4**	**<50**	**<0.02**	**<10**	**<0.01**	**<50**	**<0.02**	**<10**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<50**	**<0.5**	**<10**	**<0.5**	**<10**	**<0.5**	**<50**	**<0.5**	**<10**	**<0.5**	**<50**	**<0.5**	**<10**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**0.21**		**0.21**		**0.21**		**0.25**		**0.25**		**0.25**		**0.24**		**0.21**		**0.21**		**0.21**	
Median Concentration *	**0.25**	**5**	**0.25**	**5**	**0.25**	**5**	**0.25**	**25**	**0.25**	**5**	**0.25**	**5**	**0.25**	**25**	**0.25**	**5**	**0.25**	**25**	**0.25**	**5**
Standard Deviation *	**0.094**		**0.092**		**0.092**		**0**		**0**		**0**		**0.019**		**0.092**		**0.094**		**0.092**	
95% UCL (Student's-t) *	**0.228**		**0.228**		**0.228**		**0.25**		**0.25**		**0.25**		**0.245**		**0.228**		**0.228**		**0.228**	
% of Detects	**0**	**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**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		Chlorinated hydrocarbons EPAVic		cis-1,2-dichloroethene		1,1,2-trichloroethane		trans-1,3-dichloropropene		Vinyl chloride		Bromoform		Carbon tetrachloride		Chlorodibromomethane		Chloroethane		trans-1,2-dichloroethene	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		0.01	5	0.01	1	0.04	1	0.5	1	0.02	5	0.5	1	0.01	1	0.5	1	0.5	5	0.02	1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits											120										
EPA Victoria IWRG621 PIW Category B Upper Limits										4.8											
EPA Victoria IWRG621 PIW Category C Leached Upper Limits											30										
EPA Victoria IWRG621 PIW Category C Upper Limts										1.2											
EPA Victoria IWRG621 NPIW Upper Limits		1																			
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

Table 1 - Tabulated Results

		Chlorinated hydrocarbons EPAVic		cis-1,2-dichloroethene		1,1,2-trichloroethane		trans-1,3-dichloropropene		Vinyl chloride		Bromoform		Carbon tetrachloride		Chlorodibromomethane		Chloroethane		trans-1,2-dichloroethene	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.01		<0.01		<0.04				<0.02				<0.01						<0.02	
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Table 1 - Tabulated Results

		Chlorinated hydrocarbons EPAVic		cis-1,2-dichloroethene		1,1,2-trichloroethane		trans-1,3-dichloropropene		Vinyl chloride		Bromoform		Carbon tetrachloride		Chlorodibromomethane		Chloroethane		trans-1,2-dichloroethene	
		mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<0.50		<0.50		<0.50				<0.50				<0.50						<0.50	
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results	57	1	57	1	57	1	29	1	57	1	29	1	57	1	29	1	29	1	57	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<50	<0.01	<10	<0.04	<10	<0.5	<10	<0.02	<50	<0.5	<10	<0.01	<10	<0.5	<10	<0.5	<50	<0.02	<10
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<50	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<50	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<50	<0.5	<10
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.21		0.21		0.21		0.25		0.21		0.25		0.21		0.25		0.25		0.21	
Median Concentration *	0.25	25	0.25	5	0.25	5	0.25	5	0.25	25	0.25	5	0.25	5	0.25	5	0.25	25	0.25	5
Standard Deviation *	0.094		0.094		0.088		0		0.092		0		0.094		0		0		0.092	
95% UCL (Student's-t) *	0.228		0.228		0.229		0.25		0.228		0.25		0.228		0.25		0.25		0.228	
% of Detects	0	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	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

				NA					PCBs												
		Tetrachloroethene	Tetrachloroethene	MBAS Calculated as MW: 288	Redox Potential mV	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232		Arochlor 1242		Arochlor 1248		Arochlor 1254		Arochlor 1221		Arochlor 1260		
		mg/kg	µg/L	mg/L	MV	UG/KG	µg/L	%	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
EQL		0.02	1	0.2	1	0.05		0.1	0.1	5	0.1	5	0.1	5	0.1	5	0.1	5	0.1	5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					
EPA Victoria IWRG621 NPIW Upper Limits																					
Location Code	**Field ID**																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS	<0.50				<10.0	<0.05	31.9													
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS						<0.05														
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS	<0.50				<10.0	<0.05	32.4													
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS	<0.50				<10.0	<0.05	30.1													
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS	<0.50				<10.0	<0.05	29.4													
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS	<0.50				<10.0	<0.05	31.3													
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS						<0.05														
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS	<0.50				<10.0	<0.05	30.9													
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS	<0.50				<10.0	<0.05	28.2													
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS	<0.50				<10.0	<0.05	29.2													
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS	<0.50				<10.0	<0.05	30.4													
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS						<0.05														
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS	<0.50				<10.0	<0.05	30.4													
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF					<0.05															

				NA					PCBs												
		Tetrachloroethene	Tetrachloroethene	MBAS Calculated as MW: 288	Redox Potential mV	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232		Arochlor 1242		Arochlor 1248		Arochlor 1254		Arochlor 1221		Arochlor 1260		Arochlor 101
		mg/kg	µg/L	mg/L	MV	UG/KG	µg/L	%	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS	<0.50				<10.0	<0.05	31.0													
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS	<0.50				<10.0	<0.05	31.1													
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS	<0.50				<10.0	<0.05	31.6													
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS						<0.01														
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS	<0.50				<10.0	<0.05	32.1													
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS	<0.02				<0.2	<0.01	34.2													
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS	<0.02				<0.2	<0.01	32.5													
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS						<0.01														
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS	<0.02				<0.2	<0.01	30.3													
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF					<0.05															
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS	<0.02				<0.2	<0.01	30.9													
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS						<0.01														
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS	<0.02				<0.2	<0.01	33.3													
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS	<0.02				<0.2	<0.01	32.3													
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS	<0.02				<0.2	<0.01	31.6													
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS	<0.02				<0.2	<0.01	31.0													
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS	<0.02				<0.2	<0.01	31.8													
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS						<0.01														
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS	<0.02				<0.2	<0.01	28.4													
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS						<0.01														
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1

Table 1 - Tabulated Results

				NA					PCBs												
		Tetrachloroethene	Tetrachloroethene	MBAS Calculated as MW: 288	Redox Potential mV	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232		Arochlor 1242		Arochlor 1248		Arochlor 1254		Arochlor 1221		Arochlor 1260		Arochlor 101
		mg/kg	µg/L	mg/L	MV	UG/KG	µg/L	%	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF					<0.05															
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF					<0.05															
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS	<0.50				<10.0	<0.05	33.2													
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF					<0.05															
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF					<0.05															
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS	<0.50				<10.0	<0.05	33.4													
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS						<0.05														
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS	<0.50				<10.0	<0.05	33.9													
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS						<0.05														
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.5				<10			<0.1		<0.1		<0.1		<0.1		<0.1		<0.1		<0.1
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF					<0.05															
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS	<0.50				<10.0	<0.05	35.1													
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS						<0.05														

Statistics

Number of Results	57	1	1	1	116	56	28	29	1	29	1	29	1	29	1	29	1	29	1	29
Number of Detects	0	0	1	1	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.02	<10	1.2	210	<0.05	<0.01	28.2	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1
Minimum Detect	ND	ND	1.2	210	ND	ND	28.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<10	1.2	210	<10	<0.05	35.1	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1	<5	<0.1
Maximum Detect	ND	ND	1.2	210	ND	ND	35.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.21				2	0.016	31	0.05		0.05		0.05		0.05		0.05		0.05		0.05
Median Concentration *	0.25	5	1.2	210	0.025	0.025	31.45	0.05	2.5	0.05	2.5	0.05	2.5	0.05	2.5	0.05	2.5	0.05	2.5	0.05
Standard Deviation *	0.092				2.4	0.01	1.7	0		0		0		0		0		0		0
95% UCL (Student's-t) *	0.228				2.424	0.0187	32.04	0.05		0.05		0.05		0.05		0.05		0.05		0.05
% of Detects	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	0	0	100	100	0	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

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

					Inorganics																
		Aroclor 1016	PCBs (Sum of total)	PCBs (Sum of total)	Ammonia as N	BOD	COD	Dissolved Oxygen	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	TSS	Kjeldahl Nitrogen Total	Nitrite + Nitrate as N	Nitrite (as N)	Nitrogen (Total)	TDS	Nitrate (as N)	pH (aqueous extract)	Fluoride
		µg/L	mg/kg	µg/L	mg/L	mg/L	mg/L	mg/L	-	-	-	-	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	-	mg/kg
EQL		5	0.1	5	0.01	5	25	0.01	0.1	0.1	0.1	0.1	5	0.2	0.05	0.02	200	10	0.02	0.1	40
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits																					40,000
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts																					10,000
EPA Victoria IWRG621 NPIW Upper Limits			2																		450
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS		<0.1						1.6	5.1	9.2	5.0									290
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS									9.6											
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS		<0.1						1.6	5.1	9.2	5.0									240
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS									8.4											
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF		<0.1																	9.1	200
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF									5.2		5.0									
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF									9.2		6.0									
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF		<0.1																	8.9	<100
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF									5.2		5.0									
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF									9.2		6.0									
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF		<0.1																	9.0	250
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF									5.1		5.0									
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF									9.1		6.0									
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS		<0.1						1.5	5.1	9.1	5.0									180
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS		<0.1						1.5	5.2	9.0	5.0									220
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS									10.0											
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF		<0.1																	8.8	<100
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF									5.1		5.0									
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF									9.2		6.0									
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF		<0.1																	9.1	120
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF									5.2		5.0									
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF									9.2		6.0									
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS		<0.1						1.5	5.1	9.2	5.0									220
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS									9.5											
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF		<0.1																	9.2	140
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF									5.3		5.0									
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF									9.5		6.0									
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS		<0.1						1.6	5.1	9.2	5.0									230
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS		<0.1						1.6	5.2	9.4	5.0									200
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS									10.1											
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF		<0.1																	9.0	130
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF									5.2		5.0									
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF									9.4		6.0									
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF		<0.1																	9.7	<100
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF									5.3		5.0									
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF									9.8		6.0									
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS		<0.1						1.6	5.1	9.3	5.0									230
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS									9.7											
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS		<0.1						1.5	5.0	9.3	5.0									210
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS									9.6											
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS		<0.1						1.5	5.1	9.3	5.0									250
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF		<0.1																	9.0	150
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF									5.2		5.0									
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF									9.2		6.0									
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF		<0.1																	8.9	<100
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF									5.2		5.0									
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF									9.2		6.0									
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF		<0.1																	9.5	240
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF									5.3		5.1									
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF									9.3		6.1									

Table 1 - Tabulated Results

					Inorganics																
		Aroclor 1016	PCBs (Sum of total)	PCBs (Sum of total)	Ammonia as N	BOD	COD	Dissolved Oxygen	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	TSS	Kjeldahl Nitrogen Total	Nitrite + Nitrate as N	Nitrite (as N)	Nitrogen (Total)	TDS	Nitrate (as N)	pH (aqueous extract)	Fluoride
		µg/L	mg/kg	µg/L	mg/L	mg/L	mg/L	mg/L	-	-	-	-	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	-	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS		<0.1						1.6	5.1	9.3	5.0									250
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS									9.6											
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS		<0.1						1.3	5.1	9.1	5.0									170
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS									9.6											
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF		<0.1																	9.0	160
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF									5.1		5.1									
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF									9.2		6.1									
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF		<0.1																	9.0	140
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF									5.0		5.1									
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF									9.1		6.1									
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS		<0.1						1.3	5.1	8.8	5.0									160
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS									9.5											
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF		<0.1																	8.9	160
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF									9.1		6.1									
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS		<0.1						1.4	5.1	9.1	5.0									170
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF		<0.1																	9.0	<100
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF									5.0		5.1									
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF									9.2		6.1									
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS		<0.1						1.5	5.1	9.1	5.0									230
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS									10.1											
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS		<0.1						1.5	5.1	8.7	5.0									220
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS									9.4											
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF		<0.1																	8.9	110
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF									5.4		5.1									
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF									9.5		6.1									
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS		<0.1						1.7	5.2	9.2	5.0									180
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS									7.6											
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF		<0.1																	9.0	390
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF									8.9		6.0									
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF		<0.1																	9.0	160
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF									9.0		6.0									
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF		<0.1																	8.9	<100
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF									5.2		5.1									
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF									9.1		6.0									
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF		<0.1																	9.0	210
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF									9.1		6.0									
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS		<0.1						1.6	5.1	9.1	5.0									190
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS									9.6											
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS		<0.1						1.7	5.2	9.1	5.0									170
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF		<0.1																	9.3	110
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF									9.1		6.0									
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS		<0.1						1.6	5.2	9.1	5.0									150
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS									9.7											
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF		<0.1																	8.9	<100
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF									8.9		6.0									
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS		<0.1						1.6	5.2	9.4	5.0									170
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS									9.7											
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF		<0.1																	9.1	630
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF									9.1		6.0									
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS		<0.1						1.6	5.2	9.4	5.0									160
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS									9.7											
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS		<0.1						1.6	5.1	9.3	5.0									170
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS									9.6											
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS		<0.1						1.6	5.2	9.2	5.0									190
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS									9.6											
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF		<0.1																	9.0	500

Table 1 - Tabulated Results

					Inorganics																
		Arochlor 1016	PCBs (Sum of total)	PCBs (Sum of total)	Ammonia as N	BOD	COD	Dissolved Oxygen	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	TSS	Kjeldahl Nitrogen Total	Nitrite + Nitrate as N	Nitrite (as N)	Nitrogen (Total)	TDS	Nitrate (as N)	pH (aqueous extract)	Fluoride
		µg/L	mg/kg	µg/L	mg/L	mg/L	mg/L	mg/L	-	-	-	-	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	-	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF									5.1		5.1									
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF									9.1		6.0									
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF		<0.1																	8.9	180
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF									5.1		5.1									
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF									9.1		6.0									
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF		<0.1																	8.9	230
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF									5.1		5.1									
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF									8.9		6.0									
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS		<0.1						1.6	5.1	9.4	5.0									180
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF		<0.1																	9.2	<100
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF									5.2		5.1									
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF									9.3		6.0									
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF		<0.1																	8.9	<100
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF									5.2		5.1									
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF									9.0		6.0									
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS		<0.1						1.6	5.1	9.2	5.0									190
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS									9.8											
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS		<0.1						1.5	5.1	9.1	5.0									180
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS									9.5											
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF		<0.1																	8.7	120
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF									5.2		5.1									
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF									9.0		6.0									
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS		<0.1						1.5	5.1	8.8	5.0									170
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS									9.5											

Statistics

Number of Results	1	57	1	1	1	1	1	28	114	28	86	1	1	1	1	1	1	1	29	57
Number of Detects	0	0	0	0	1	1	1	28	114	28	86	1	0	0	0	0	1	0	29	48
Minimum Concentration	<5	<0.1	<5	<0.01	7.3	180	8.3	1.3	5	8.7	5	1,200	<2	<0.05	<0.02	<2,000	5,200	<0.02	8.7	<100
Minimum Detect	ND	ND	ND	ND	7.3	180	8.3	1.3	5	8.7	5	1,200	ND	ND	ND	ND	5,200	ND	8.7	110
Maximum Concentration	<5	<0.1	<5	<0.01	7.3	180	8.3	1.7	10.1	9.4	6.1	1,200	<2	<0.05	<0.02	<2,000	5,200	<0.02	9.7	630
Maximum Detect	ND	ND	ND	ND	7.3	180	8.3	1.7	10.1	9.4	6.1	1,200	ND	ND	ND	ND	5,200	ND	9.7	630
Average Concentration *		0.05						1.5	7.2	9.2	5.4								9	182
Median Concentration *	2.5	0.05	2.5	0.005	7.3	180	8.3	1.6	6.5	9.2	5.1	1,200	1	0.025	0.01	1,000	5,200	0.01	9	170
Standard Deviation *		0						0.096	2.1	0.18	0.47								0.2	102
95% UCL (Student's-t) *		0.05						1.577	7.572	9.222	5.451								9.091	204.1
% of Detects	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	100	0	100	84
% of Non-Detects	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	100	0	16

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

							Halogenated Benzenes														
			pH (Lab)	Moisture Content (dried @ 103°C)	Cyanide Total	Cyanide Total	1,2,4-trichlorobenzene		1,2-dichlorobenzene		1,3-dichlorobenzene		1,4-dichlorobenzene		Bromobenzene		4-chlorotoluene		Chlorobenzene	Chlorobenzene	
		mg/L	-	%	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
EQL		0.5	0.1	1	1	0.005	0.01	1	0.02	1	0.5	1	0.02	1	0.5	1	0.5	1	0.02	1	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits		600				32															
EPA Victoria IWRG621 PIW Category B Upper Limits					10,000																
EPA Victoria IWRG621 PIW Category C Leached Upper Limits		150				8															
EPA Victoria IWRG621 PIW Category C Upper Limts					2,500																
EPA Victoria IWRG621 NPIW Upper Limits					50																
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF			34	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF			32	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF			27	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF			22	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF			32	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

Table 1 - Tabulated Results

							Halogenated Benzenes														
			pH (Lab)	Moisture Content (dried @ 103°C)	Cyanide Total	Cyanide Total	1,2,4-trichlorobenzene		1,2-dichlorobenzene		1,3-dichlorobenzene		1,4-dichlorobenzene		Bromobenzene		4-chlorotoluene		Chlorobenzene	Chlorobenzene	
		mg/L	-	%	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF			28	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF			33	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF			30	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF			34	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF			28	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF			34	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS				<1		<0.01		<0.02				<0.02						<0.02		
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF			29	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5

							Halogenated Benzenes														
			pH (Lab)	Moisture Content (dried @ 103°C)	Cyanide Total	Cyanide Total	1,2,4-trichlorobenzene		1,2-dichlorobenzene		1,3-dichlorobenzene		1,4-dichlorobenzene		Bromobenzene		4-chlorotoluene		Chlorobenzene	Chlorobenzene	
		mg/L	-	%	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF			29	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF			33	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF			34	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF			31	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF			36	<5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS				<5		<0.50		<0.50				<0.50						<0.50		
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results		1	1	29	57	1	57	1	57	1	29	1	57	1	29	1	29	1	57	1	29
Number of Detects		1	1	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration		1.3	7.9	22	<1	<0.005	<0.01	<10	<0.02	<10	<0.5	<10	<0.02	<10	<0.5	<10	<0.5	<10	<0.02	<10	<0.5
Minimum Detect		1.3	7.9	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		1.3	7.9	36	<5	<0.005	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<10	<0.5
Maximum Detect		1.3	7.9	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *				31	2.1		0.21		0.21		0.25		0.21		0.25		0.25		0.21		0.25
Median Concentration *		1.3	7.9	31	2.5	0.0025	0.25	5	0.25	5	0.25	5	0.25	5	0.25	5	0.25	5	0.25	5	0.25
Standard Deviation *				2.7	0.77		0.094		0.092		0		0.092		0		0		0.092		0
95% UCL (Student's-t) *				31.63	2.319		0.228		0.228		0.25		0.228		0.25		0.25		0.228		0.25
% of Detects		100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects		0	0	0	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

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

		Halogenated Hydrocarbons									MAH										
			Bromomethane		1,2-dibromoethane		Dichlorodifluoromethane		Trichlorofluoromethane	Trichlorofluoromethane	Total MAH		Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene		Styrene		Isopropylbenzene		1,2,4-trimethylbenzene	1,2,4-trimethylbenzene
		µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL		1	0.5	5	0.5	1	0.5	5	0.5	5	0.5	0.003	0.2	0.5	1	0.5	1	0.5	1	0.5	1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 PIW Category B Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category B Upper Limits													240								
EPA Victoria IWRG621 PIW Category C Leached Upper Limits																					
EPA Victoria IWRG621 PIW Category C Upper Limts													70								
EPA Victoria IWRG621 NPIW Upper Limits													7								
Location Code	Field ID																				
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS												<0.5			<0.5					
B02.01	SX_OB_20220301_08_53_SS_Duplicate_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220301_08_53_SS_Primary_ALS																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_08_53_SS_Triplicate_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_09_00_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_02_SS_Primary_EUF																				
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220301_12_04_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS												1.2			1.2					
B02.01	SX_OB_20220301_16_28_SS_Primary_ALS																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Duplicate_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Primary_EUF																				
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS												<0.5			<0.5					
B02.01	SX_OB_20220301_16_31_SS_Triplicate_ALS																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_04_SS_Primary_EUF																				
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220301_20_10_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_00_01_SS_Primary_ALS																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_00_06_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_04_06_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_08_15_SS_Duplicate_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_08_15_SS_Primary_ALS																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_15_SS_Triplicate_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_08_19_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_12_07_SS_Primary_EUF																				

		Halogenated Hydrocarbons									MAH										
			Bromomethane		1,2-dibromoethane		Dichlorodifluoromethane		Trichlorofluoromethane	Trichlorofluoromethane	Total MAH		Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene		Styrene		Isopropylbenzene		1,2,4-trimethylbenzene	1,2,4-trimethylbenzene
		µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF																				
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF																				
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF																				
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS																				
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF																				
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF																				
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS																				
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF																				
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF																				
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF																				
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS												<0.2			<0.5					
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS												<0.2			<0.5					
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	

Table 1 - Tabulated Results

		Halogenated Hydrocarbons									MAH										
		Iodomethane	Bromomethane		1,2-dibromoethane		Dichlorodifluoromethane		Trichlorofluoromethane	Trichlorofluoromethane	Total MAH		Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene		Styrene		Isopropylbenzene		1,2,4-trimethylbenzene	1,2,4-trimethylbenzene
		µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS												<0.5			<0.5					
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS																				
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF		<0.5		<0.5		<0.5		<0.5		<0.5			<0.5		<0.5		<0.5		<0.5	
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF																				
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS												<0.5			<0.5					
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS																				

Statistics

Number of Results		1	29	1	29	1	29	1	29	1	29	1	28	29	1	57	1	29	1	29	1
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Minimum Concentration		<10	<0.5	<50	<0.5	<10	<0.5	<50	<0.5	<50	<0.5	<0.02	<0.2	<0.5	<10	<0.5	<10	<0.5	<10	<0.5	<10
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.2	ND	ND	ND	ND	ND
Maximum Concentration		<10	<0.5	<50	<0.5	<10	<0.5	<50	<0.5	<50	<0.5	<0.02	1.2	<0.5	<10	1.2	<10	<0.5	<10	<0.5	<10
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.2	ND	ND	ND	ND	ND
Average Concentration *			0.25		0.25		0.25		0.25		0.25		0.23	0.25		0.27		0.25		0.25	
Median Concentration *		5	0.25	25	0.25	5	0.25	25	0.25	25	0.25	0.01	0.25	0.25	5	0.25	5	0.25	5	0.25	5
Standard Deviation *			0		0		0		0		0		0.2	0		0.13		0		0	
95% UCL (Student's-t) *			0.25		0.25		0.25		0.25		0.25		0.296	0.25		0.295		0.25		0.25	
% of Detects		0	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0
% of Non-Detects		100	100	100	100	100	100	100	100	100	100	100	96	100	100	98	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

Table 1 - Tabulated Results

		Solvents										SPOCAS
		4-Methyl-2-pentanone		Acetone		Allyl chloride		Carbon disulfide		Methyl Ethyl Ketone	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	-
EQL		0.5	5	0.5	0.005	0.5	0.001	0.5	1	0.5	5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold												
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold												
EPA Victoria IWRG621 PIW Category B Leached Upper Limits												
EPA Victoria IWRG621 PIW Category B Upper Limits												
EPA Victoria IWRG621 PIW Category C Leached Upper Limits												
EPA Victoria IWRG621 PIW Category C Upper Limts												
EPA Victoria IWRG621 NPIW Upper Limits												
Location Code	**Field ID**											
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**											8.0
B02.01	**SX_OB_20220301_08_53_SS_Duplicate_ALS**											
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**											8.1
B02.01	**SX_OB_20220301_08_53_SS_Primary_ALS**											
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**											
B02.01	**SX_OB_20220301_08_53_SS_Triplicate_EUF**											
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_09_00_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_12_02_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**											7.8
B02.01	**SX_OB_20220301_12_04_SS_Primary_ALS**											
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**											8.5
B02.01	**SX_OB_20220301_16_28_SS_Primary_ALS**											
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**											
B02.01	**SX_OB_20220301_16_31_SS_Duplicate_EUF**											
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_16_31_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**											7.9
B02.01	**SX_OB_20220301_16_31_SS_Triplicate_ALS**											
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_20_04_SS_Primary_EUF**											
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**											7.8
B02.01	**SX_OB_20220301_20_10_SS_Primary_ALS**											
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**											8.4
B02.01	**SX_OB_20220302_00_01_SS_Primary_ALS**											
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_00_06_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_04_02_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**											8.1
B02.01	**SX_OB_20220302_04_06_SS_Primary_ALS**											
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**											7.8
B02.01	**SX_OB_20220302_08_15_SS_Duplicate_ALS**											
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**											7.8
B02.01	**SX_OB_20220302_08_15_SS_Primary_ALS**											
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**											
B02.01	**SX_OB_20220302_08_15_SS_Triplicate_EUF**											
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_08_19_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**											
B02.01	**SX_OB_20220302_12_07_SS_Primary_EUF**											

		Solvents										SPOCAS
		4-Methyl-2-pentanone		Acetone		Allyl chloride		Carbon disulfide		Methyl Ethyl Ketone	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	-
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS											7.8
B02.01	SX_OB_20220302_12_11_SS_Primary_ALS											
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS											7.8
B02.01	SX_OB_20220302_16_04_SS_Primary_ALS											
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF											
B02.01	SX_OB_20220302_16_07_SS_Duplicate_EUF											
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF											
B02.01	SX_OB_20220302_16_07_SS_Primary_EUF											
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS											7.7
B02.01	SX_OB_20220302_16_07_SS_Triplicate_ALS											
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF											
B02.01	SX_OB_20220302_19_58_SS_Primary_EUF											
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS											7.7
B02.01	SX_OB_20220302_23_54_SS_Primary_ALS											
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF											
B02.01	SX_OB_20220303_03_55_SS_Primary_EUF											
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS											8.3
B02.01	SX_OB_20220303_08_07_SS_Primary_ALS											
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS											7.8
B02.01	SX_OB_20220303_08_08_SS_Duplicate_ALS											
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF											
B02.01	SX_OB_20220303_08_09_SS_Triplicate_EUF											
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS											7.7
B02.01	SX_OB_20220303_12_23_SS_Primary_ALS											
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF											
B02.01	SX_OB_20220303_12_24_SS_Primary_EUF											
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF											
B02.01	SX_OB_20220303_12_25_SS_Primary_EUF											
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF											
B02.01	SX_OB_20220303_16_19_SS_Duplicate_EUF											
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF											
B02.01	SX_OB_20220303_16_19_SS_Primary_EUF											
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS											7.7
B02.01	SX_OB_20220303_16_19_SS_Triplicate_ALS											
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS											8.1
B02.01	SX_OB_20220303_16_24_SS_Primary_ALS											
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF											
B02.01	SX_OB_20220303_20_10_SS_Primary_EUF											
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS											8.2
B02.01	SX_OB_20220303_20_12_SS_Primary_ALS											
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF											
B02.01	SX_OB_20220304_00_01_SS_Primary_EUF											
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS											7.8
B02.01	SX_OB_20220304_00_02_SS_Primary_ALS											
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF											
B02.01	SX_OB_20220304_04_02_SS_Primary_EUF											
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS											8.0
B02.01	SX_OB_20220304_04_04_SS_Primary_ALS											
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS											7.8
B02.01	SX_OB_20220304_08_22_SS_Duplicate_ALS											
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS											7.8
B02.01	SX_OB_20220304_08_22_SS_Primary_ALS											
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		

Table 1 - Tabulated Results

		Solvents										SPOCAS
		4-Methyl-2-pentanone		Acetone		Allyl chloride		Carbon disulfide		Methyl Ethyl Ketone	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	µg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	µg/L	mg/kg	µg/L	-
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF											
B02.01	SX_OB_20220304_08_22_SS_Triplicate_EUF											
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF											
B02.01	SX_OB_20220304_08_24_SS_Primary_EUF											
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF											
B02.01	SX_OB_20220304_12_11_SS_PRIMARY_EUF											
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS											8.0
B02.01	SX_OB_20220304_12_16_SS_Primary_ALS											
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF											
B02.01	SX_OB_20220304_16_09_SS_DUPLICATE_EUF											
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF											
B02.01	SX_OB_20220304_16_09_SS_PRIMARY_EUF											
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS											8.0
B02.01	SX_OB_20220304_16_09_SS_Triplicate_ALS											
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS											7.8
B02.01	SX_OB_20220304_16_17_SS_Primary_ALS											
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF	<0.5		<0.5		<0.5		<0.5		<0.5		
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF											
B02.01	SX_OB_20220304_20_09_SS_PRIMARY_EUF											
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS											7.7
B02.01	SX_OB_20220305_00_02_SS_Primary_ALS											

Statistics

Number of Results	29	1	29	1	29	1	29	1	29	1	28
Number of Detects	0	0	0	0	0	0	0	0	0	0	28
Minimum Concentration	<0.5	<50	<0.5	<0.05	<0.5	<0.01	<0.5	<10	<0.5	<50	7.7
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7
Maximum Concentration	<0.5	<50	<0.5	<0.05	<0.5	<0.01	<0.5	<10	<0.5	<50	8.5
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5
Average Concentration *	0.25		0.25		0.25		0.25		0.25		7.9
Median Concentration *	0.25	25	0.25	0.025	0.25	0.005	0.25	5	0.25	25	7.8
Standard Deviation *	0		0		0		0		0		0.22
95% UCL (Student's-t) *	0.25		0.25		0.25		0.25		0.25		7.996
% of Detects	0	0	0	0	0	0	0	0	0	0	100
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	0

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold
EPA Victoria, 13 Sep 2019, EPA PFAS Classification - Tunnel Zone - No option for disposal threshold
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category B Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Leached Upper Limits
EPA Victoria, July 2009, EPA Victoria IWRG621 Category C Upper Limts
EPA Victoria, July 2009, EPA Victoria IWRG621 Fill Upper Limits

ATTACHMENT B: 95% UCL AVE CALCULATIONS

1	**UCL Statistics for Data Sets with Non-Detects**			
2				
3	User Selected Options			
4	Date/Time of Computation	ProUCL 5.116/03/2022 7:46:38 PM		
5	From File	WorkSheet.xls		
6	Full Precision	OFF		
7	Confidence Coefficient	95%		
8	Number of Bootstrap Operations	2000		
9				
10				
11	**Arsenic**			
12				
13	**General Statistics**			
14	Total Number of Observations	41	Number of Distinct Observations	17
15			Number of Missing Observations	0
16	Minimum	15	Mean	23.8
17	Maximum	40	Median	24
18	SD	5.363	Std. Error of Mean	0.838
19	Coefficient of Variation	0.225	Skewness	1.011
20				
21	**Normal GOF Test**			
22	Shapiro Wilk Test Statistic	0.914	**Shapiro Wilk GOF Test**	
23	5% Shapiro Wilk Critical Value	0.941	Data Not Normal at 5% Significance Level	
24	Lilliefors Test Statistic	0.139	**Lilliefors GOF Test**	
25	5% Lilliefors Critical Value	0.137	Data Not Normal at 5% Significance Level	
26	**Data Not Normal at 5% Significance Level**			
27				
28	**Assuming Normal Distribution**			
29	**95% Normal UCL**		**95% UCLs (Adjusted for Skewness)**	
30	95% Student's-t UCL	25.22	95% Adjusted-CLT UCL (Chen-1995)	25.32
31			95% Modified-t UCL (Johnson-1978)	25.24
32				
33	**Gamma GOF Test**			
34	A-D Test Statistic	0.684	**Anderson-Darling Gamma GOF Test**	
35	5% A-D Critical Value	0.747	Detected data appear Gamma Distributed at 5% Significance Level	
36	K-S Test Statistic	0.13	**Kolmogorov-Smirnov Gamma GOF Test**	
37	5% K-S Critical Value	0.138	Detected data appear Gamma Distributed at 5% Significance Level	
38	**Detected data appear Gamma Distributed at 5% Significance Level**			
39				
40	**Gamma Statistics**			
41	k hat (MLE)	21.7	k star (bias corrected MLE)	20.13
42	Theta hat (MLE)	1.097	Theta star (bias corrected MLE)	1.183
43	nu hat (MLE)	1779	nu star (bias corrected)	1650
44	MLE Mean (bias corrected)	23.8	MLE Sd (bias corrected)	5.306
45			Approximate Chi Square Value (0.05)	1557
46	Adjusted Level of Significance	0.0441	Adjusted Chi Square Value	1554
47				
48	**Assuming Gamma Distribution**			
49	95% Approximate Gamma UCL (use when n>=50)	25.23	95% Adjusted Gamma UCL (use when n<50)	25.29
50				
51	**Lognormal GOF Test**			
52	Shapiro Wilk Test Statistic	0.959	**Shapiro Wilk Lognormal GOF Test**	
53	5% Shapiro Wilk Critical Value	0.941	Data appear Lognormal at 5% Significance Level	
54	Lilliefors Test Statistic	0.121	**Lilliefors Lognormal GOF Test**	

5% Lilliefors Critical Value	0.137	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	2.708	Mean of logged Data	3.147
Maximum of Logged Data	3.689	SD of logged Data	0.216

Assuming Lognormal Distribution

95% H-UCL	25.26	90% Chebyshev (MVUE) UCL	26.22
95% Chebyshev (MVUE) UCL	27.32	97.5% Chebyshev (MVUE) UCL	28.85
99% Chebyshev (MVUE) UCL	31.85		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	25.18	95% Jackknife UCL	25.22
95% Standard Bootstrap UCL	25.21	95% Bootstrap-t UCL	25.48
95% Hall's Bootstrap UCL	25.52	95% Percentile Bootstrap UCL	25.27
95% BCA Bootstrap UCL	25.29		
90% Chebyshev(Mean, Sd) UCL	26.32	95% Chebyshev(Mean, Sd) UCL	27.46
97.5% Chebyshev(Mean, Sd) UCL	29.04	99% Chebyshev(Mean, Sd) UCL	32.14

Suggested UCL to Use

95% Adjusted Gamma UCL	25.29		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Copper

General Statistics

Total Number of Observations	41	Number of Distinct Observations	28
		Number of Missing Observations	0
Minimum	50	Mean	66.66
Maximum	110	Median	66
SD	12.55	Std. Error of Mean	1.96
Coefficient of Variation	0.188	Skewness	1.298

Normal GOF Test

Shapiro Wilk Test Statistic	0.913	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.941	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.121	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.137	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	69.96	95% Adjusted-CLT UCL (Chen-1995)	70.31
		95% Modified-t UCL (Johnson-1978)	70.02

	A	B	C	D	E	F	G	H	I	J	K	L
109	**Gamma GOF Test**											
110	A-D Test Statistic					0.415	**Anderson-Darling Gamma GOF Test**					
111	5% A-D Critical Value					0.747	Detected data appear Gamma Distributed at 5% Significance Level					
112	K-S Test Statistic					0.0936	**Kolmogorov-Smirnov Gamma GOF Test**					
113	5% K-S Critical Value					0.138	Detected data appear Gamma Distributed at 5% Significance Level					
114	**Detected data appear Gamma Distributed at 5% Significance Level**											
115												
116	**Gamma Statistics**											
117	k hat (MLE)					31.96	k star (bias corrected MLE)					29.64
118	Theta hat (MLE)					2.086	Theta star (bias corrected MLE)					2.249
119	nu hat (MLE)					2620	nu star (bias corrected)					2430
120	MLE Mean (bias corrected)					66.66	MLE Sd (bias corrected)					12.24
121							Approximate Chi Square Value (0.05)					2317
122	Adjusted Level of Significance					0.0441	Adjusted Chi Square Value					2313
123												
124	**Assuming Gamma Distribution**											
125	95% Approximate Gamma UCL (use when n>=50))					69.93	95% Adjusted Gamma UCL (use when n<50)					70.05
126												
127	**Lognormal GOF Test**											
128	Shapiro Wilk Test Statistic					0.961	**Shapiro Wilk Lognormal GOF Test**					
129	5% Shapiro Wilk Critical Value					0.941	Data appear Lognormal at 5% Significance Level					
130	Lilliefors Test Statistic					0.0833	**Lilliefors Lognormal GOF Test**					
131	5% Lilliefors Critical Value					0.137	Data appear Lognormal at 5% Significance Level					
132	**Data appear Lognormal at 5% Significance Level**											
133												
134	**Lognormal Statistics**											
135	Minimum of Logged Data					3.912	Mean of logged Data					4.184
136	Maximum of Logged Data					4.7	SD of logged Data					0.176
137												
138	**Assuming Lognormal Distribution**											
139	95% H-UCL					69.91	90% Chebyshev (MVUE) UCL					72.15
140	95% Chebyshev (MVUE) UCL					74.65	97.5% Chebyshev (MVUE) UCL					78.13
141	99% Chebyshev (MVUE) UCL					84.96						
142												
143	**Nonparametric Distribution Free UCL Statistics**											
144	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
145												
146	**Nonparametric Distribution Free UCLs**											
147	95% CLT UCL					69.88	95% Jackknife UCL					69.96
148	95% Standard Bootstrap UCL					69.87	95% Bootstrap-t UCL					70.58
149	95% Hall's Bootstrap UCL					70.86	95% Percentile Bootstrap UCL					69.88
150	95% BCA Bootstrap UCL					70.56						
151	90% Chebyshev(Mean, Sd) UCL					72.54	95% Chebyshev(Mean, Sd) UCL					75.2
152	97.5% Chebyshev(Mean, Sd) UCL					78.9	99% Chebyshev(Mean, Sd) UCL					86.16
153												
154	**Suggested UCL to Use**											
155	95% Student's-t UCL					69.96						
156												
157	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
158	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
159												
160	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
161	Recommendations are based upon data size, data distribution, and skewness.											
162	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											

163	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.			
164				
165	**Chromium (hexavalent)**			
166				
167	**General Statistics**			
168	Total Number of Observations	41	Number of Distinct Observations	5
169	Number of Detects	6	Number of Non-Detects	35
170	Number of Distinct Detects	4	Number of Distinct Non-Detects	2
171	Minimum Detect	0.5	Minimum Non-Detect	0.5
172	Maximum Detect	1.1	Maximum Non-Detect	1
173	Variance Detects	0.06	Percent Non-Detects	85.37%
174	Mean Detects	0.7	SD Detects	0.245
175	Median Detects	0.6	CV Detects	0.35
176	Skewness Detects	1.102	Kurtosis Detects	-0.3
177	Mean of Logged Detects	-0.403	SD of Logged Detects	0.325
178				
179	**Normal GOF Test on Detects Only**			
180	Shapiro Wilk Test Statistic	0.827	**Shapiro Wilk GOF Test**	
181	5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
182	Lilliefors Test Statistic	0.325	**Lilliefors GOF Test**	
183	5% Lilliefors Critical Value	0.325	Detected Data Not Normal at 5% Significance Level	
184	**Detected Data appear Approximate Normal at 5% Significance Level**			
185				
186	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**			
187	KM Mean	0.612	KM Standard Error of Mean	0.0631
188	KM SD	0.16	95% KM (BCA) UCL	N/A
189	95% KM (t) UCL	0.718	95% KM (Percentile Bootstrap) UCL	N/A
190	95% KM (z) UCL	0.716	95% KM Bootstrap t UCL	N/A
191	90% KM Chebyshev UCL	0.801	95% KM Chebyshev UCL	0.887
192	97.5% KM Chebyshev UCL	1.006	99% KM Chebyshev UCL	1.24
193				
194	**Gamma GOF Tests on Detected Observations Only**			
195	A-D Test Statistic	0.547	**Anderson-Darling GOF Test**	
196	5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level	
197	K-S Test Statistic	0.32	**Kolmogorov-Smirnov GOF**	
198	5% K-S Critical Value	0.332	Detected data appear Gamma Distributed at 5% Significance Level	
199	**Detected data appear Gamma Distributed at 5% Significance Level**			
200				
201	**Gamma Statistics on Detected Data Only**			
202	k hat (MLE)	10.96	k star (bias corrected MLE)	5.59
203	Theta hat (MLE)	0.0639	Theta star (bias corrected MLE)	0.125
204	nu hat (MLE)	131.5	nu star (bias corrected)	67.08
205	Mean (detects)	0.7		
206				
207	**Gamma ROS Statistics using Imputed Non-Detects**			
208	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs			
209	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)			
210	For such situations, GROS method may yield incorrect values of UCLs and BTVs			
211	This is especially true when the sample size is small.			
212	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
213	Minimum	0.258	Mean	0.586
214	Maximum	1.1	Median	0.569
215	SD	0.19	CV	0.324
216	k hat (MLE)	9.802	k star (bias corrected MLE)	9.101

	A	B	C	D	E	F	G	H	I	J	K	L
217	Theta hat (MLE)					0.0598	Theta star (bias corrected MLE)					0.0644
218	nu hat (MLE)					803.7	nu star (bias corrected)					746.3
219	Adjusted Level of Significance (β)					0.0441						
220	Approximate Chi Square Value (746.25, α)					683.9	Adjusted Chi Square Value (746.25, β)					681.7
221	95% Gamma Approximate UCL (use when n>=50)					0.64	95% Gamma Adjusted UCL (use when n<50)					0.642
222												
223	**Estimates of Gamma Parameters using KM Estimates**											
224	Mean (KM)					0.612	SD (KM)					0.16
225	Variance (KM)					0.0255	SE of Mean (KM)					0.0631
226	k hat (KM)					14.72	k star (KM)					13.66
227	nu hat (KM)					1207	nu star (KM)					1120
228	theta hat (KM)					0.0416	theta star (KM)					0.0448
229	80% gamma percentile (KM)					0.745	90% gamma percentile (KM)					0.832
230	95% gamma percentile (KM)					0.908	99% gamma percentile (KM)					1.062
231												
232	**Gamma Kaplan-Meier (KM) Statistics**											
233	Approximate Chi Square Value (N/A, α)					1043	Adjusted Chi Square Value (N/A, β)					1041
234	95% Gamma Approximate KM-UCL (use when n>=50)					0.657	95% Gamma Adjusted KM-UCL (use when n<50)					0.659
235												
236	**Lognormal GOF Test on Detected Observations Only**											
237	Shapiro Wilk Test Statistic					0.854	**Shapiro Wilk GOF Test**					
238	5% Shapiro Wilk Critical Value					0.788	Detected Data appear Lognormal at 5% Significance Level					
239	Lilliefors Test Statistic					0.297	**Lilliefors GOF Test**					
240	5% Lilliefors Critical Value					0.325	Detected Data appear Lognormal at 5% Significance Level					
241	**Detected Data appear Lognormal at 5% Significance Level**											
242												
243	**Lognormal ROS Statistics Using Imputed Non-Detects**											
244	Mean in Original Scale					0.588	Mean in Log Scale					-0.572
245	SD in Original Scale					0.177	SD in Log Scale					0.293
246	95% t UCL (assumes normality of ROS data)					0.635	95% Percentile Bootstrap UCL					0.634
247	95% BCA Bootstrap UCL					0.635	95% Bootstrap t UCL					0.641
248	95% H-UCL (Log ROS)					0.639						
249												
250	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
251	KM Mean (logged)					-0.519	KM Geo Mean					0.595
252	KM SD (logged)					0.228	95% Critical H Value (KM-Log)					1.739
253	KM Standard Error of Mean (logged)					0.0925	95% H-UCL (KM -Log)					0.65
254	KM SD (logged)					0.228	95% Critical H Value (KM-Log)					1.739
255	KM Standard Error of Mean (logged)					0.0925						
256												
257	**DL/2 Statistics**											
258	**DL/2 Normal**						**DL/2 Log-Transformed**					
259	Mean in Original Scale					0.523	Mean in Log Scale					-0.668
260	SD in Original Scale					0.12	SD in Log Scale					0.193
261	95% t UCL (Assumes normality)					0.555	95% H-Stat UCL					0.551
262	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
263												
264	**Nonparametric Distribution Free UCL Statistics**											
265	**Detected Data appear Approximate Normal Distributed at 5% Significance Level**											
266												
267	**Suggested UCL to Use**											
268	95% KM (t) UCL					0.718						
269												
270	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											

	A	B	C	D	E	F	G	H	I	J	K	L
271	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
272												
273	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
274	Recommendations are based upon data size, data distribution, and skewness.											
275	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
276	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
277												
278												
279	**Nickel**											
280												
281	**General Statistics**											
282	Total Number of Observations					41	Number of Distinct Observations					27
283							Number of Missing Observations					0
284	Minimum					128	Mean					177.2
285	Maximum					260	Median					170
286	SD					34.4	Std. Error of Mean					5.373
287	Coefficient of Variation					0.194	Skewness					0.717
288												
289	**Normal GOF Test**											
290	Shapiro Wilk Test Statistic					0.93	**Shapiro Wilk GOF Test**					
291	5% Shapiro Wilk Critical Value					0.941	Data Not Normal at 5% Significance Level					
292	Lilliefors Test Statistic					0.17	**Lilliefors GOF Test**					
293	5% Lilliefors Critical Value					0.137	Data Not Normal at 5% Significance Level					
294	**Data Not Normal at 5% Significance Level**											
295												
296	**Assuming Normal Distribution**											
297	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
298	95% Student's-t UCL					186.2	95% Adjusted-CLT UCL (Chen-1995)					186.7
299							95% Modified-t UCL (Johnson-1978)					186.3
300												
301	**Gamma GOF Test**											
302	A-D Test Statistic					0.635	**Anderson-Darling Gamma GOF Test**					
303	5% A-D Critical Value					0.747	Detected data appear Gamma Distributed at 5% Significance Level					
304	K-S Test Statistic					0.148	**Kolmogorov-Smirnov Gamma GOF Test**					
305	5% K-S Critical Value					0.138	Data Not Gamma Distributed at 5% Significance Level					
306	**Detected data follow Appr. Gamma Distribution at 5% Significance Level**											
307												
308	**Gamma Statistics**											
309	k hat (MLE)					28.72	k star (bias corrected MLE)					26.63
310	Theta hat (MLE)					6.17	Theta star (bias corrected MLE)					6.653
311	nu hat (MLE)					2355	nu star (bias corrected)					2184
312	MLE Mean (bias corrected)					177.2	MLE Sd (bias corrected)					34.33
313							Approximate Chi Square Value (0.05)					2077
314	Adjusted Level of Significance					0.0441	Adjusted Chi Square Value					2073
315												
316	**Assuming Gamma Distribution**											
317	95% Approximate Gamma UCL (use when n>=50)					186.4	95% Adjusted Gamma UCL (use when n<50)					186.7
318												
319	**Lognormal GOF Test**											
320	Shapiro Wilk Test Statistic					0.955	**Shapiro Wilk Lognormal GOF Test**					
321	5% Shapiro Wilk Critical Value					0.941	Data appear Lognormal at 5% Significance Level					
322	Lilliefors Test Statistic					0.136	**Lilliefors Lognormal GOF Test**					
323	5% Lilliefors Critical Value					0.137	Data appear Lognormal at 5% Significance Level					
324	**Data appear Lognormal at 5% Significance Level**											

Lognormal Statistics

Minimum of Logged Data	4.852	Mean of logged Data	5.16
Maximum of Logged Data	5.561	SD of logged Data	0.187

Assuming Lognormal Distribution

95% H-UCL	186.5	90% Chebyshev (MVUE) UCL	192.8
95% Chebyshev (MVUE) UCL	199.9	97.5% Chebyshev (MVUE) UCL	209.7
99% Chebyshev (MVUE) UCL	229.1		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	186	95% Jackknife UCL	186.2
95% Standard Bootstrap UCL	185.9	95% Bootstrap-t UCL	187.2
95% Hall's Bootstrap UCL	187	95% Percentile Bootstrap UCL	185.9
95% BCA Bootstrap UCL	186.6		
90% Chebyshev(Mean, Sd) UCL	193.3	95% Chebyshev(Mean, Sd) UCL	200.6
97.5% Chebyshev(Mean, Sd) UCL	210.7	99% Chebyshev(Mean, Sd) UCL	230.7

Suggested UCL to Use

95% Adjusted Gamma UCL	186.7		

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Fluoride

General Statistics

Total Number of Observations	41	Number of Distinct Observations	20
Number of Detects	36	Number of Non-Detects	5
Number of Distinct Detects	19	Number of Distinct Non-Detects	1
Minimum Detect	110	Minimum Non-Detect	100
Maximum Detect	630	Maximum Non-Detect	100
Variance Detects	10320	Percent Non-Detects	12.2%
Mean Detects	216.7	SD Detects	101.6
Median Detects	180	CV Detects	0.469
Skewness Detects	2.715	Kurtosis Detects	8.499
Mean of Logged Detects	5.306	SD of Logged Detects	0.355

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.701	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.26	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

	A B C D E	F	G H I J K	L
379	KM Mean	202.4	KM Standard Error of Mean	16.05
380	KM SD	101.3	95% KM (BCA) UCL	233.4
381	95% KM (t) UCL	229.5	95% KM (Percentile Bootstrap) UCL	231.2
382	95% KM (z) UCL	228.8	95% KM Bootstrap t UCL	240.7
383	90% KM Chebyshev UCL	250.6	95% KM Chebyshev UCL	272.4
384	97.5% KM Chebyshev UCL	302.7	99% KM Chebyshev UCL	362.1
385				
386	**Gamma GOF Tests on Detected Observations Only**			
387	A-D Test Statistic	1.841	**Anderson-Darling GOF Test**	
388	5% A-D Critical Value	0.749	Detected Data Not Gamma Distributed at 5% Significance Level	
389	K-S Test Statistic	0.192	**Kolmogorov-Smirnov GOF**	
390	5% K-S Critical Value	0.147	Detected Data Not Gamma Distributed at 5% Significance Level	
391	**Detected Data Not Gamma Distributed at 5% Significance Level**			
392				
393	**Gamma Statistics on Detected Data Only**			
394	k hat (MLE)	7.098	k star (bias corrected MLE)	6.525
395	Theta hat (MLE)	30.52	Theta star (bias corrected MLE)	33.2
396	nu hat (MLE)	511.1	nu star (bias corrected)	469.8
397	Mean (detects)	216.7		
398				
399	**Gamma ROS Statistics using Imputed Non-Detects**			
400	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs			
401	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)			
402	For such situations, GROS method may yield incorrect values of UCLs and BTVs			
403	This is especially true when the sample size is small.			
404	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
405	Minimum	21.99	Mean	196.3
406	Maximum	630	Median	180
407	SD	110.1	CV	0.561
408	k hat (MLE)	3.423	k star (bias corrected MLE)	3.189
409	Theta hat (MLE)	57.36	Theta star (bias corrected MLE)	61.57
410	nu hat (MLE)	280.7	nu star (bias corrected)	261.5
411	Adjusted Level of Significance (β)	0.0441		
412	Approximate Chi Square Value (261.50, α)	225.1	Adjusted Chi Square Value (261.50, β)	223.8
413	95% Gamma Approximate UCL (use when n>=50)	228.1	95% Gamma Adjusted UCL (use when n<50)	229.4
414				
415	**Estimates of Gamma Parameters using KM Estimates**			
416	Mean (KM)	202.4	SD (KM)	101.3
417	Variance (KM)	10267	SE of Mean (KM)	16.05
418	k hat (KM)	3.991	k star (KM)	3.716
419	nu hat (KM)	327.3	nu star (KM)	304.7
420	theta hat (KM)	50.72	theta star (KM)	54.48
421	80% gamma percentile (KM)	281.5	90% gamma percentile (KM)	343.2
422	95% gamma percentile (KM)	400.2	99% gamma percentile (KM)	522.4
423				
424	**Gamma Kaplan-Meier (KM) Statistics**			
425	Approximate Chi Square Value (304.69, α)	265.3	Adjusted Chi Square Value (304.69, β)	263.9
426	95% Gamma Approximate KM-UCL (use when n>=50)	232.5	95% Gamma Adjusted KM-UCL (use when n<50)	233.7
427				
428	**Lognormal GOF Test on Detected Observations Only**			
429	Shapiro Wilk Test Statistic	0.894	**Shapiro Wilk GOF Test**	
430	5% Shapiro Wilk Critical Value	0.935	Detected Data Not Lognormal at 5% Significance Level	
431	Lilliefors Test Statistic	0.161	**Lilliefors GOF Test**	
432	5% Lilliefors Critical Value	0.145	Detected Data Not Lognormal at 5% Significance Level	

	A	B	C	D	E	F	G	H	I	J	K	L
433	Detected Data Not Lognormal at 5% Significance Level											
434												
435	Lognormal ROS Statistics Using Imputed Non-Detects											
436	Mean in Original Scale					201.5	Mean in Log Scale					5.21
437	SD in Original Scale					103.6	SD in Log Scale					0.425
438	95% t UCL (assumes normality of ROS data)					228.8	95% Percentile Bootstrap UCL					228.9
439	95% BCA Bootstrap UCL					235.7	95% Bootstrap t UCL					242.5
440	95% H-UCL (Log ROS)					226.9						
441												
442	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution											
443	KM Mean (logged)					5.221	KM Geo Mean					185.1
444	KM SD (logged)					0.401	95% Critical H Value (KM-Log)					1.83
445	KM Standard Error of Mean (logged)					0.0635	95% H-UCL (KM -Log)					225.2
446	KM SD (logged)					0.401	95% Critical H Value (KM-Log)					1.83
447	KM Standard Error of Mean (logged)					0.0635						
448												
449	DL/2 Statistics											
450	DL/2 Normal						DL/2 Log-Transformed					
451	Mean in Original Scale					196.3	Mean in Log Scale					5.136
452	SD in Original Scale					109.9	SD in Log Scale					0.569
453	95% t UCL (Assumes normality)					225.2	95% H-Stat UCL					238.3
454	DL/2 is not a recommended method, provided for comparisons and historical reasons											
455												
456	Nonparametric Distribution Free UCL Statistics											
457	Data do not follow a Discernible Distribution at 5% Significance Level											
458												
459	Suggested UCL to Use											
460	95% KM (t) UCL					229.5	KM H-UCL					225.2
461	95% KM (BCA) UCL					233.4						
462												
463	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
464	Recommendations are based upon data size, data distribution, and skewness.											
465	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
466	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
467												

ATTACHMENT C: QUALITY ASSURANCE / QUALITY CONTROL ASSESSMENT

Quality Assurance / Quality Control Assessment

For:		
	Waste Cat Report Number	B02.0120220316202511_01
	Holding Bay Numbers	B02.01
	Laboratory Batch ID's	EM2203825, EM2203824, EM2203659, EM2203882, EM2203634, EM2203621, 868799, 868643, 868800, 868276, 867796, 867790, 868272

Agon Environmental implemented a Quality Assurance and Quality Control Program during the assessment. Quality assurance (QA) is defined as the planning process and systematic actions undertaken to ensure the representativeness of a field investigation. These processes are assessed against the Quality Controls (QC) which measures the success of the QA procedures against targets

Item	Description	Acceptability Limits	Completeness of Records?	Acceptability Limits Met?	Description of Exceptions, Non compliance Issues?	Exceptions, Non compliance Issues Closed Out?	Exceptions, Non compliance Issues Affect Waste Classification?	Comment
Sampling Team	Fieldwork to be undertaken by a suitably qualified sampling team experienced in contaminated site assessment and trained in the specific requrements of this project.	Records exist to demonstrate this	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
Sampling of spoil and spoil water	The use of standardised field sheets to record the spoil and spoil water sampling activities, and observations made.	Records for each sampling event complete, checked, and saved to Agon and MH at the end of the sampling shift	yes	Yes		Yes	No	
	The Frequency, Scope, Methods of sampling	Records Demonstrate the Frequency, Scope, Methods of sampling as per SAQP WGT-302-000-REP-CJH-105-SAP-00001 Revision 5 for EPA Approved Facility	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Prevention of Cross Contamination Measures	Records demonstrate consistent use of appropriate procedures and equipment decontamination to avoid/ minimise sample cross-contamination.						
	· New laboratory supplied 10Litre buckets and sample receptacles used during sampling		Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	· New disposable gloves used when collecting each sample		Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	· Re-usable sampling equipment (shovel) decontaminated between collection of each sample using triple wash method and use of Liquinox (does not contain PFAS) detergent		Yes	Yes		Yes	No	
	· Sample storage and handling to minimise the potential for cross contamination		Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Laboratory check of effectiveness of Prevention of Cross Contamination Measures	Concentrations of COPC in rinsate blanks are less than the laboratory Limit of Reporting (LOR).	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Sample containers and storage before transport to laboratories	Records demonstrate samples placed in the appropriate laboratory supplied containers for the required analysis.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Records demonstrate 10litres and other samples placed in refrigerated container at Pivot – temperature of refrigerated container set to 4 degrees Celsius;	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
Sample Transport to Laboratories	Sample Storage and Transport	Laboratory Records saved to Agon and MH demonstrate that						
		· Samples transported in appropriate laboratory supplied containers with the correct preservatives.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Samples transported to laborootoires by courier under COC conditions	Yes	Yes		Yes	No	
	Chain of Custody (CoC) and Sample Receipt Notifocation (SRN)	A signed Chain of Custody (CoC) form with the sample names, sampling date, sample preservation type and required analyses, to be maintained with the sample batch until receipt at the analysing laboratory.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Completed CoC forms signed by both the sender (the sampler) and the receiver (the laboratory) and saved to Agon and MH.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Copies of the Sample Receipt Notification to be saved to Agon and MH	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Analytical suite	Analytical suite compliant with SAQP and is suitable to categorise the spoil with reference to the analytics listed in Table 2 of IWRG621 and PFAS (PFOA, PFOS, PFHxS)	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Holding Times	All samples to be extracted within the applicable holding times	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
			Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Limits of Reporting	All LOR achieved comply with SAQP requirements	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Scope of analyses	All primary and field qc samples in all batches analysed	Yes	Yes		Yes	No Exceptions , Non Compliance issues	

Quality Assurance / Quality Control Assessment

For:	**Waste Cat Report Number**	B02.0120220316202511_01
	Holding Bay Numbers	B02.01
	Laboratory Batch ID's	EM2203825, EM2203824, EM2203659, EM2203882, EM2203634, EM2203621, 868799, 868643, 868800, 868276, 867796, 867790, 868272

Agon Environmental implemented a Quality Assurance and Quality Control Program during the assessment. Quality assurance (QA) is defined as the planning process and systematic actions undertaken to ensure the representativeness of a field investigation. These processes are assessed against the Quality Controls (QC) which measures the success of the QA procedures against targets

Item	Description	Acceptability Limits	Completeness of Records?	Acceptability Limits Met?	Description of Exceptions, Non compliance Issues?	Exceptions, Non compliance Issues Closed Out?	Exceptions, Non compliance Issues Affect Waste Classification?	Comment
Laboratory Analyses	Field QC sample Results	Field duplicates: Acceptable RPDs: 80% (1-10 x LOR), 50% (10-30 x LOR) and 30% (>30 x LOR) or other NATA accepted RPD for a laboratory method.	Yes	No	5 instances where addopted RPD criteria are exceeded for arsenic, nickel or fluoride	Yes	No Exceptions , Non Compliance issues	RPD Exceedences do not effect classification decicion as UCL calculations have biased towards the highest data.
		Field inter-laboratory duplicates: Acceptable RPDs: 80% (1-10 x LOR), 50% (10-30 x LOR) and 30% (>30 x LOR) or other NATA accepted RPD for a laboratory method.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Rinsate Blanks: Concentrations of COPC to be less than the laboratory LOR.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Trip Blanks: Concentrations of COPC to be less than the laboratory LOR.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Laboratory Internal QC	Laboratory Analysis Methods to comply with the NEPM 2013 and to be accredited by NATA.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Method Blanks (MB): MB to be analysed at a frequency of 1 per 20 samples, with a minimum of one per sample batch	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Method Blanks (MB): Concentrations of COPC to be less than the laboratory LOR.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Laboratory Control Sample (LCS):LCS to be analysed at a frequency of 1 per 20 samples, with a minimum of one per sample batch.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Laboratory Control Sample (LCS): LCS percentage recovery to be within the acceptable range, generally between 70-130%.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Matrix Spike Recoveries (MSR): MSR to be analysed at a frequency of 1 per 20 samples, with a minimum of one per sample batch.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Matrix Spike Recoveries (MSR): MSR percentage recovery to be within the acceptable range, generally between 70-130%.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Surrogates: Surrogates to be analysed at a frequency of 1 per 20 samples, with a minimum of one per sample batch.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Surrogates: Surrogate percentage recovery to be within the acceptable range, generally between 70-130%.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Laboratory Duplicates: Laboratory Duplicate samples to be analysed at one per process batch (per analyte method), or two if the process batch exceeds 10 samples.	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Laboratory Duplicates: Acceptable RPDs: 80% (1-10 x LOR), 50% (10-30 x LOR) and 30% (>30 x LOR).	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
Data Evaluation and WCR Preparation	Data Evaluation	Data evaluation accounts for field and laboratory information	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
		Data evaluation has been reviewed and approved by a principal at Agon as complying with the SAQP WGT-302-000-REP-CJH-105-SAP-00001 Revision 5 for EPA Approved Facility	Yes	Yes		Yes	No Exceptions , Non Compliance issues	
	Waste Cat Report Review	Waste Cat Report has been reviewed and approved by a principal at Agon as complying with the MotherHub requirements and with the SAQP WGT-302-000-REP-CJH-105-SAP-00001 Revision 5 for EPA Approved Facility	Yes	Yes		Yes	No Exceptions , Non Compliance issues	

Quality Control Assessment Conclusion

1. The review of QC data indicated an acceptable degree of accuracy, precision, and overall representativeness for the data. The quality of the data is considered suitable for the Waste Cat Report.

2. The review of the Waste Cat report indicated that it complies with the CPBJH JV MotherHub requirements and with the SAQP WGT-302-000-REP-CJH-105-SAP-00001 Revision 5 for EPA Approved Facility's

Quality Control Report prepared by:	**David Lawson**	
Quality Control Report reviewed by:	**Craig Trimbur**	

								Metals										
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								2	0.4	5	2	0.5	5	0.1	2	2	2	2
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		20	<0.4	72	120	<1	<5	<0.1	<5	200	<2	<2
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	24	<0.4	69	94	<1	<5	<0.1	<5	210	<2	<2
RPD								18	0	4	24	0	0	0	0	5	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		20	<0.4	72	120	<1	<5	<0.1	<5	200	<2	<2
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	21	<1	64	101	<1.0	<5	<0.1	<5	158	<5	<2
RPD								5	0	12	17	0	0	0	0	23	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		25	<1	57	98	<1.0	<5	<0.1	<5	157	<5	<2
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	23	<1	54	93	<1.0	<5	<0.1	<5	133	<5	<2
RPD								8	0	5	5	0	0	0	0	17	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		25	<1	57	98	<1.0	<5	<0.1	<5	157	<5	<2
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	28	<0.4	60	120	<1	5.0	<0.1	<5	160	<2	<2
RPD								11	0	5	20	0	0	0	0	2	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		25	<1	57	98	<1.0	<5	<0.1	<5	157	<5	<2
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		27	<0.4	79	110	<1	<5	<0.1	<5	220	<2	<2
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	19	<0.4	70	110	<1	<5	<0.1	<5	200	<2	<2
RPD								35	0	12	0	0	0	0	0	10	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		27	<0.4	79	110	<1	<5	<0.1	<5	220	<2	<2
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	20	<1	64	90	<1.0	<5	<0.1	<5	149	<5	<2
RPD								30	0	21	20	0	0	0	0	**38**	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		19	<5	63	92	<1.0	<5	<0.1	<5	168	<5	<2
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	23	1	68	114	<1.0	5	<0.1	<5	173	<5	<2
RPD								19	0	8	21	0	0	0	0	3	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		19	<5	63	92	<1.0	<5	<0.1	<5	168	<5	<2
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	39	<0.4	96	150	<1	6.6	<0.1	<5	250	<2	<2
RPD								**69**	0	42	48	0	28	0	0	**39**	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		19	<5	63	92	<1.0	<5	<0.1	<5	168	<5	<2
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		23	<0.4	70	130	<1	5.0	<0.1	<5	210	<2	<2
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	27	<0.4	77	150	<1	6.2	<0.1	<5	230	<2	<2
RPD								16	0	10	14	0	21	0	0	9	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		23	<0.4	70	130	<1	5.0	<0.1	<5	210	<2	<2

								Metals										
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	11	<1	30	55	0.5	<5	<0.1	<2	76	<5	<2
RPD								**71**	0	**80**	**81**	0	0	0	0	**94**	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		26	<1	61	91	<0.5	<5	<0.1	<2	135	<5	<2
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	19	<1	52	87	<0.5	<5	<0.1	<2	112	<5	<2
RPD								31	0	16	4	0	0	0	0	19	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		26	<1	61	91	<0.5	<5	<0.1	<2	135	<5	<2
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	23	<0.4	71	110	<1	<5	<0.1	<5	170	<2	<2
RPD								12	0	15	19	0	0	0	0	23	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		26	<1	61	91	<0.5	<5	<0.1	<2	135	<5	<2
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		27	<0.4	80	150	<1	5.8	<0.1	<5	210	<2	<2
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	19	<0.4	62	130	<1	5.6	<0.1	<5	180	<2	<2
RPD								35	0	25	14	0	4	0	0	15	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		27	<0.4	80	150	<1	5.8	<0.1	<5	210	<2	<2
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	14	<1	59	69	<1.0	<5	<0.1	<5	182	<5	<2
RPD								**63**	0	30	**74**	0	15	0	0	14	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		20	<1	54	98	0.5	<5	<0.1	<2	142	<5	<2
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	21	<1	63	105	0.6	<5	<0.1	<2	163	<5	<2
RPD								5	0	15	7	18	0	0	0	14	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		20	<1	54	98	0.5	<5	<0.1	<2	142	<5	<2
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	21	<0.4	66	120	<1	<5	<0.1	<5	190	<2	<2
RPD								5	0	20	20	0	0	0	0	29	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		20	<1	54	98	0.5	<5	<0.1	<2	142	<5	<2
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

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

Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								5	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	0			0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<10	98	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	28			0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<10	86	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	17	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	16			0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<10	200			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	**42**			0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<10	200			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<10	120	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	**50**			0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<10	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<10	105	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	9	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<10	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<10	170			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	**56**			0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<10	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	14			0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6

								Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<5	49	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	91			0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5	94	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<5	79	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	17	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5	94	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	32			0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5	94	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	22			0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<10	99	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	41			0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5	90	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<5	106	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	16	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5	90	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	36			0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5	90	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

								PAH										
								Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								PAH										
								Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

										BTEX								
								Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.1	0.1	0.1	0.1	0.2	0.3	10	10	50
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04134**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04134**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04141**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621001**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07394**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07394**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07399**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634002**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09943**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50

										BTEX								
								Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**											
RPD																		

***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: 81 (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**

								TRH				TPH						
								C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								50	100	100	50	10	20	50	50	50	0.03	0.03
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05

								TRH				TPH						
								C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PF	4/03/2022		868800	MGT	Normal		<50	<100	<100	<100	<20	31	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	43	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PF	4/03/2022		868800	MGT	Normal		<50	<100	<100	<100	<20	31	<50	<50	<50	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PF	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PF	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PF	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

***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: 81 (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**

								Orga										
								Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.03	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.05	0.03	0.03
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04134**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04134**	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04141**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621001**	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07394**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07394**	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07399**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634002**	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09943**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

								Orga										
								Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

***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: 81 (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**

								nochlorine Pesticides										
								chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

								ochlorine Pesticides										
								chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

								Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.03	0.03	0.03	0.03	0.05	0.05	0.03	0.03	0.2	0.05
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04134**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04134**		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04141**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**												
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04148**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621001**		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621009**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07394**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07394**		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07399**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**												
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07404**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634002**		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634004**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09943**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	

								Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**		<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**											
RPD																		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**												
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**		<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**											
RPD																		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**											
RPD																		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**												
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**		<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**			<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**											
RPD																		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**												
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**											
RPD																		

***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: 81 (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**

								Phenols										
								4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								5	10	0.03	0.5	5	0.03	1	0.5	0.2	1	5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5

								Phenols										
								4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<5		<0.03		<5	<0.03	<1	<1	<1	<1	<5
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

								3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.4	5	5	0.5	1	20	0.00001	0.0005	0.00001	0.0005	0.00005
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	

								3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
RPD								0	0	0	0			0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal								<0.00001		<0.00001		<0.00005
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
RPD								0	0	0	0			0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007							<0.00001		<0.00001		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015							<0.00005		<0.00005		<0.00005
RPD														0		0		0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015							<0.00001		<0.00001		<0.00005
RPD														0		0		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: 81 (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**

								acid (6:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.0005	0.00001	0.0005	0.00005	0.0005	0.00002	0.0002	0.00005	0.0005	0.00005	0.0005
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005

								acid (6:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		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: 81 (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**

								N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.00002	0.0002	0.00005	0.0005	0.00005	0.001	0.00001	0.0002	0.00001	0.0002	0.00001
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04134**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04134**	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04141**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04148**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04148**	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621001**	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621009**	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621009**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07394**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07394**	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07399**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07404**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07404**	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634002**	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634004**	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634004**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09943**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	

								N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.01		<0.005		<0.005		<0.005		<0.005	
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		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: 81 (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**

								PFOS/PFOA										
								(PFDoDA)	Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

								PFOS/PFOA										
								(PFDoDA)	Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		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: 81 (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**

								Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.00001	0.005	0.00001	0.0002	0.00002	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	

								Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
RPD											0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
RPD										0	0	0	0	0	0	0	0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
RPD										0	0	0	0	0	0	0	0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal				<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		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: 81 (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

								acid (PFPrS)	Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.005	0.00001	0.0005	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04134**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04134**		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04141**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Du**	**1/03/2022**		**867796**	**MGT**	**Field_D**	**M22-Ma04148**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_16_31_SS_Pr**	**1/03/2022**		**867796**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_16_31_SS_Tr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma04148**		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621001**		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621001**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_08_53_SS_Du**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Field_D**	**EM2203621009**		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220301_08_53_SS_Pr**	**1/03/2022**		**EM2203621**	**ALSE-Melbourne**	**Normal**			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	**SX_OB_20220301_08_53_SS_Tr**	**1/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203621009**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07394**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07394**		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07399**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Du**	**2/03/2022**		**868276**	**MGT**	**Field_D**	**M22-Ma07404**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_16_07_SS_Pr**	**2/03/2022**		**868276**	**MGT**	**Normal**			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_16_07_SS_Tr**	**2/03/2022**		**EM2203824**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma07404**		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634002**		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634002**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_15_SS_Du**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Field_D**	**EM2203634004**		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220302_08_15_SS_Pr**	**2/03/2022**		**EM2203634**	**ALSE-Melbourne**	**Normal**			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	**SX_OB_20220302_08_15_SS_Tr**	**2/03/2022**		**867796**	**MGT**	**Interlab_D**	**EM2203634004**		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09943**	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

								acid (PFPrS)	Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943		<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
RPD										0		0		0		0		0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001		<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007		<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
RPD									0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		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: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

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

Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample	Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.00001	0.0002	0.00001	0.005	0.00001	0.005	0.00001	0.0002	0.5	0.01	0.5
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148	<0.00001						<0.00010				
RPD								0						0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD								0	0					0	0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.00001						<0.00010				
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009	<0.00001						<0.00010				
RPD								0						0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.00001						<0.00010				
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404	<0.00001						<0.00001				
RPD								0						0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD								0	0					0	0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.00001						<0.00010				
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004	<0.00001						<0.00010				
RPD								0						0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.00001						<0.00010				
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5

								Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**	<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
RPD									0						0		0	
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**	<0.00001						<0.00001				
RPD								0						0				
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**	<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
RPD								0	0					0	0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00001						<0.00001				
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**	<0.00001						<0.00001				
RPD								0						0				
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**		<0.00001						<0.00001				
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.00001		<0.00001		<0.00001		<0.0001				
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**	<0.00001						<0.00010				
RPD								0						0				
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**	<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
RPD								0	0					0	0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00001						<0.00001				
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**	<0.00001						<0.00001				
RPD								0						0				
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**		<0.00001						<0.00001				
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						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: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))**

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

Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.02	0.5	0.5	0.5	0.01	0.5	0.01	0.02	0.02	0.5	0.5
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0				0		0	0	0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0				0		0	0	0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.02				<0.01		<0.01	<0.02	<0.02		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.02				<0.01		<0.01	<0.02	<0.02		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0				0		0	0	0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.02				<0.01		<0.01	<0.02	<0.02		
RPD								0				0		0	0	0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0				0		0	0	0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.02				<0.01		<0.01	<0.02	<0.02		
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

								Chlorinated Hydrocarbons										
								Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.4	0.02	0.01	0.02	0.01	0.01	0.04	0.5	0.02	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								Chlorinated Hydrocarbons										
								Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943		<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001		<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007		<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0	0	0	0	0		0	
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02	
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

													NA					
								Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg
EQL								0.01	0.5	0.5	0.02	0.02	0.05		0.1	0.1	0.1	0.1
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0	0	0	0	0	0			0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134	<0.50			<0.50	<0.50	<10.0	<0.05	31.3			
RPD								0			0	0	0					
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal							<0.05					
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141						<0.05					
RPD													0					
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal							<0.05					
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148						<0.05					
RPD													0					
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal							<0.05					
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148							<0.05				
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.4			
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001	<0.50			<0.50	<0.50	<10.0	<0.05	31.9			
RPD								0			0	0	0	0	2			
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.4			
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.4			
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001						<0.05					
RPD													0					
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								<0.05				
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009							<0.05				
RPD														0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								<0.05				
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009						<0.05					
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0	0	0	0	0	0			0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394	<0.50			<0.50	<0.50	<10.0	<0.05	31.6			
RPD								0			0	0	0					
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal							<0.05					
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399						<0.05					
RPD													0					
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal							<0.05					
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404						<0.05					
RPD													0					
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal							<0.05					
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404							<0.01				
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.4			
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002	<0.50			<0.50	<0.50	<10.0	<0.05	30.4			
RPD								0			0	0	0	0	0			
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.4			
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.4			
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002						<0.05					
RPD													0					
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								<0.05				
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004							<0.05				
RPD														0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								<0.05				
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004						<0.05					
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0	0	0	0	0	0			0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1

													NA						
								Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943	<0.01			<0.02	<0.02	<0.2	<0.01	30.9			
RPD								0			0	0	0					
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal							<0.05					
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952						<0.05					
RPD													0					
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal							<0.05					
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961						<0.05					
RPD													0					
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal							<0.05					
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961							<0.01				
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	34.2			
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001	<0.01			<0.02	<0.02	<0.2	<0.01	32.5			
RPD								0			0	0	0	0	5			
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	34.2			
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	34.2			
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001						<0.05					
RPD													0					
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal								<0.01				
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003							<0.01				
RPD														0				
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal								<0.01				
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003						<0.05					
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0	0	0	0	0	0			0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106	<0.50			<0.50	<0.50	<10.0	<0.05	33.4			
RPD								0			0	0	0					
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal							<0.05					
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111						<0.05					
RPD													0					
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal							<0.05					
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116						<0.05					
RPD													0					
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal							<0.05					
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116							<0.05				
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	28.4			
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007	<0.01			<0.02	<0.02	<0.2	<0.01	31.8			
RPD								0			0	0	0	0	11			
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	28.4			
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal		<0.01			<0.02	<0.02	<0.2	<0.01	28.4			
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007						<0.05					
RPD													0					
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal								<0.01				
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015							<0.01				
RPD														0				
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal								<0.01				
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015						<0.05					
RPD																		

***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: 81 (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**

								PCBs					Inorganics					
								Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg
EQL								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.1	120
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.1	<0.1	<0.1	<0.1	<0.1					8.8	<100
RPD								0	0	0	0	0					3	18
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.1	120
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134					<0.1	1.5	5.1	9.2	5.0		220
RPD												0						59
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								5.2		5.0		
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141							5.1		5.0		
RPD														2		0		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								9.2		6.0		
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148							9.2		6.0		
RPD														0		0		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal								9.2		6.0		
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148							9.5				
RPD														3				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.2	5.0		240
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001					<0.1	1.6	5.1	9.2	5.0		290
RPD												0	0	0	0	0		19
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.2	5.0		240
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.1	<0.1	<0.1	<0.1	<0.1					9.1	200
RPD												0						18
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.2	5.0		240
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001							5.2		5.0		
RPD														2		0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								8.4				
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009							9.6				
RPD														13				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal								8.4				
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009							9.2		6.0		
RPD														9				
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.0	140
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	160
RPD								0	0	0	0	0					0	13
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.0	140
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394					<0.1	1.3	5.1	8.8	5.0		160
RPD												0						13
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								5.0		5.1		
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399							5.1		5.1		
RPD														2		0		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								9.1		6.1		
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404							9.2		6.1		
RPD														1		0		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal								9.1		6.1		
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404							9.5				
RPD														4				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.1	1.5	5.1	9.3	5.0		250
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002					<0.1	1.5	5.0	9.3	5.0		210
RPD												0	0	2	0	0		17
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.1	1.5	5.1	9.3	5.0		250
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	150
RPD												0						50
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.1	1.5	5.1	9.3	5.0		250
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002							5.2		5.0		
RPD														2		0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								9.5				
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004							9.6				
RPD														1				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal								9.5				
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004							9.2		6.0		
RPD														3				
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.0	210
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100
RPD								0	0	0	0	0					1	71
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.0	210

								PCBs					Inorganics					
								Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09943**					<0.1	1.6	5.1	9.1	5.0		190
RPD												0						10
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**								5.1		5.1		
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09952**							5.2		5.1		
RPD														2		0		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**								9.1		6.0		
B02.01	**SX_OB_20220303_16_19_SS_Du**	**3/03/2022**		**868643**	**MGT**	**Field_D**	**M22-Ma09961**							9.1		6.0		
RPD														0		0		
B02.01	**SX_OB_20220303_16_19_SS_Pr**	**3/03/2022**		**868643**	**MGT**	**Normal**								9.1		6.0		
B02.01	**SX_OB_20220303_16_19_SS_Tr**	**3/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma09961**							9.6				
RPD														5				
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**						<0.1	1.5	5.1	9.1	5.0		230
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659001**					<0.1	1.5	5.1	8.7	5.0		220
RPD												0	0	0	4	0		4
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**						<0.1	1.5	5.1	9.1	5.0		230
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**	<0.1	<0.1	<0.1	<0.1	<0.1					8.9	110
RPD												0						71
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**						<0.1	1.5	5.1	9.1	5.0		230
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659001**							5.4		5.1		
RPD														6		2		
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**								10.1				
B02.01	**SX_OB_20220303_08_08_SS_Du**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Field_D**	**EM2203659003**							9.4				
RPD														7				
B02.01	**SX_OB_20220303_08_07_SS_Pr**	**3/03/2022**		**EM2203659**	**ALSE-Melbourne**	**Normal**								10.1				
B02.01	**SX_OB_20220303_08_09_SS_Tr**	**3/03/2022**		**868272**	**MGT**	**Interlab_D**	**EM2203659003**							9.5		6.1		
RPD														6				
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11106**	<0.1	<0.1	<0.1	<0.1	<0.1					9.2	<100
RPD								0	0	0	0	0					3	0
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**		<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11106**					<0.1	1.6	5.1	9.2	5.0		190
RPD												0						62
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**								5.2		5.1		
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11111**							5.2		5.1		
RPD														0		0		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**								9.0		6.0		
B02.01	**SX_OB_20220304_16_09_SS_DU**	**4/03/2022**		**868800**	**MGT**	**Field_D**	**M22-Ma11116**							9.3		6.0		
RPD														3		0		
B02.01	**SX_OB_20220304_16_09_SS_PR**	**4/03/2022**		**868800**	**MGT**	**Normal**								9.0		6.0		
B02.01	**SX_OB_20220304_16_09_SS_Tr**	**4/03/2022**		**EM2203825**	**ALSE-Melbourne**	**Interlab_D**	**M22-Ma11116**							9.8				
RPD														9				
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**						<0.1	1.6	5.2	9.2	5.0		190
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882007**					<0.1	1.6	5.1	9.3	5.0		170
RPD												0	0	2	1	0		11
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**						<0.1	1.6	5.2	9.2	5.0		190
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	500
RPD												0						**90**
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**						<0.1	1.6	5.2	9.2	5.0		190
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882007**							5.1		5.1		
RPD														2		2		
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**								9.6				
B02.01	**SX_OB_20220304_08_22_SS_Du**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Field_D**	**EM2203882015**							9.6				
RPD														0				
B02.01	**SX_OB_20220304_08_22_SS_Pr**	**4/03/2022**		**EM2203882**	**ALSE-Melbourne**	**Normal**								9.6				
B02.01	**SX_OB_20220304_08_22_SS_Tr**	**4/03/2022**		**868643**	**MGT**	**Interlab_D**	**EM2203882015**							9.1		6.0		
RPD														5				

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*****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**

										Halogenated Benzenes							Halog	
								Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane
								%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								1	1	0.01	0.02	0.5	0.02	0.5	0.5	0.02	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								3	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								7	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								9	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

										Halogenated Benzenes							Halog	
								Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane
								%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943		<1	<0.01	<0.02		<0.02			<0.02		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001		<1	<0.01	<0.02		<0.02			<0.02		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	33	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								9	0	0	0	0	0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007		<1	<0.01	<0.02		<0.02			<0.02		
RPD									0	0	0		0			0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal			<1	<0.01	<0.02		<0.02			<0.02		
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

***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: 81 (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**

								enated Hydrocarbons			MAH							
								1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0		0	0	0	0	0	0
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134					<0.5		<0.5				
RPD														0				
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal												
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001					<0.5		<0.5				
RPD												0		0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0		0	0	0	0	0	0
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394					<0.5		<0.5				
RPD														0				
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal												
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002					<0.5		<0.5				
RPD												0		0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal						<0.5		<0.5				
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0		0	0	0	0	0	0
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								enated Hydrocarbons			MAH							
								1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943					<0.2		<0.5				
RPD														0				
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal												
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001					<0.2		<0.5				
RPD												0		0				
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0		0	0	0	0	0	0
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106					<0.5		<0.5				
RPD														0				
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal												
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007					<0.2		<0.5				
RPD												0		0				
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal						<0.2		<0.5				
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015											
RPD																		
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal												
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015											
RPD																		

*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: 81 (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

								Solvents			SPOCAS
								Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
								mg/kg	mg/kg	mg/kg	-
EQL								0.5	0.5	0.5	0.1
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample				
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04134	<0.5	<0.5	<0.5	
RPD								0	0	0	
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04134				7.9
RPD											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal					
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04141				
RPD											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal					
B02.01	SX_OB_20220301_16_31_SS_Du	1/03/2022		867796	MGT	Field_D	M22-Ma04148				
RPD											
B02.01	SX_OB_20220301_16_31_SS_Pr	1/03/2022		867796	MGT	Normal					
B02.01	SX_OB_20220301_16_31_SS_Tr	1/03/2022		EM2203621	ALSE-Melbourne	Interlab_D	M22-Ma04148				
RPD											
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal					8.1
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621001				8.0
RPD											1
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal					8.1
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001	<0.5	<0.5	<0.5	
RPD											
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal					8.1
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621001				
RPD											
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220301_08_53_SS_Du	1/03/2022		EM2203621	ALSE-Melbourne	Field_D	EM2203621009				
RPD											
B02.01	SX_OB_20220301_08_53_SS_Pr	1/03/2022		EM2203621	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220301_08_53_SS_Tr	1/03/2022		867796	MGT	Interlab_D	EM2203621009				
RPD											
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07394	<0.5	<0.5	<0.5	
RPD								0	0	0	
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07394				7.7
RPD											
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal					
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07399				
RPD											
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal					
B02.01	SX_OB_20220302_16_07_SS_Du	2/03/2022		868276	MGT	Field_D	M22-Ma07404				
RPD											
B02.01	SX_OB_20220302_16_07_SS_Pr	2/03/2022		868276	MGT	Normal					
B02.01	SX_OB_20220302_16_07_SS_Tr	2/03/2022		EM2203824	ALSE-Melbourne	Interlab_D	M22-Ma07404				
RPD											
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634002				7.8
RPD											0
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002	<0.5	<0.5	<0.5	
RPD											
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634002				
RPD											
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220302_08_15_SS_Du	2/03/2022		EM2203634	ALSE-Melbourne	Field_D	EM2203634004				
RPD											
B02.01	SX_OB_20220302_08_15_SS_Pr	2/03/2022		EM2203634	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220302_08_15_SS_Tr	2/03/2022		867796	MGT	Interlab_D	EM2203634004				
RPD											
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09943	<0.5	<0.5	<0.5	
RPD								0	0	0	
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal		<0.5	<0.5	<0.5	

								Solvents			SPOCAS
								Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
								mg/kg	mg/kg	mg/kg	-
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09943				7.7
RPD											
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal					
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09952				
RPD											
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal					
B02.01	SX_OB_20220303_16_19_SS_Du	3/03/2022		868643	MGT	Field_D	M22-Ma09961				
RPD											
B02.01	SX_OB_20220303_16_19_SS_Pr	3/03/2022		868643	MGT	Normal					
B02.01	SX_OB_20220303_16_19_SS_Tr	3/03/2022		EM2203882	ALSE-Melbourne	Interlab_D	M22-Ma09961				
RPD											
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal					8.3
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659001				7.8
RPD											6
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal					8.3
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001	<0.5	<0.5	<0.5	
RPD											
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal					8.3
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659001				
RPD											
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220303_08_08_SS_Du	3/03/2022		EM2203659	ALSE-Melbourne	Field_D	EM2203659003				
RPD											
B02.01	SX_OB_20220303_08_07_SS_Pr	3/03/2022		EM2203659	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220303_08_09_SS_Tr	3/03/2022		868272	MGT	Interlab_D	EM2203659003				
RPD											
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11106	<0.5	<0.5	<0.5	
RPD								0	0	0	
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal		<0.5	<0.5	<0.5	
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11106				8.0
RPD											
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal					
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11111				
RPD											
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal					
B02.01	SX_OB_20220304_16_09_SS_DU	4/03/2022		868800	MGT	Field_D	M22-Ma11116				
RPD											
B02.01	SX_OB_20220304_16_09_SS_PR	4/03/2022		868800	MGT	Normal					
B02.01	SX_OB_20220304_16_09_SS_Tr	4/03/2022		EM2203825	ALSE-Melbourne	Interlab_D	M22-Ma11116				
RPD											
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882007				7.8
RPD											0
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007	<0.5	<0.5	<0.5	
RPD											
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal					7.8
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882007				
RPD											
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220304_08_22_SS_Du	4/03/2022		EM2203882	ALSE-Melbourne	Field_D	EM2203882015				
RPD											
B02.01	SX_OB_20220304_08_22_SS_Pr	4/03/2022		EM2203882	ALSE-Melbourne	Normal					
B02.01	SX_OB_20220304_08_22_SS_Tr	4/03/2022		868643	MGT	Interlab_D	EM2203882015				
RPD											

***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: 81 (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**

ATTACHMENT D: LABORATORY CERTIFICATES

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☑ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing	**Project №**	JC0927	**Project Manager**	Craig Trimbur	**Sampler(s)**	Louis Rose - EP Risk
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	**Project Name**	20220302052643-Eurofin-21	**EDD Format** ESdat, EQuIS etc	Esdat	**Handed over by**	
Contact Name	Craig Trimbur David Lawson					**Email for Invoice**	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)					**Email for Results**	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.						
Purchase Order							
Quote ID №	Agon WGTP TST						

Analyses
Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing.

Containers
Change container type & size if necessary.

Required Turnaround Time (TAT)
Default will be 5 days if not ticked.

♦Surcharge will apply

☐ Overnight (reporting by 9am)♦
☐ Same day♦ ☐ 1 day♦
☐ 2 days♦ ☐ 3 days♦
☑ 5 days (Standard)
☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l											500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220301_20_04_SS_Primary_EUF		S	✗	✗	✗	✗	✗																			
2	SX_OB_20220302_00_06_SS_Primary_EUF		S	✗	✗	✗	✗	✗																			
3	SX_OB_20220302_04_02_SS_Primary_EUF		S	✗	✗	✗	✗	✗																			
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
			Total Counts	3	3	3	3	3																			

Method of Shipment ☐ Courier (#) ☐ Hand Delivered ☐ Postal Name Signature Date Time

Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Temperature
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №

Eurofins Environment Testing Australia Pty Ltd

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | Environment Testing Standard Terms and Conditions unless agreed otherwise. A copy is available on request.

eurofins Environment Testing

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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:	**David Lawson**
Report	**867790-L**
Project name	20220302052643-Eurofin-21
Project ID	JC0927
Received Date	Mar 02, 2022

Client Sample ID			**SX_OB_20220301_20_04_SS_Primary_EUF**	**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**	**SX_OB_20220301_20_04_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04108**	**M22-Ma04109**	**M22-Ma04110**	**M22-Ma04111**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	6.0
pH (off)	0.1	pH Units	5.3	5.2	5.3	9.5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	142	136	139	136
13C5-PFPeA (surr.)	1	%	103	89	100	90
13C5-PFHxA (surr.)	1	%	91	79	82	78
13C4-PFHpA (surr.)	1	%	81	79	78	73
13C8-PFOA (surr.)	1	%	80	78	82	74
13C5-PFNA (surr.)	1	%	64	68	64	65
13C6-PFDA (surr.)	1	%	62	76	80	90
13C2-PFUnDA (surr.)	1	%	71	95	91	126
13C2-PFDoDA (surr.)	1	%	54	78	92	118
13C2-PFTeDA (surr.)	1	%	51	64	89	107
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

Client Sample ID			SX_OB_20220301_20_04_SS_Primary_EUF	SX_OB_20220302_00_06_SS_Primary_EUF	SX_OB_20220302_04_02_SS_Primary_EUF	SX_OB_20220301_20_04_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04108**	**M22-Ma04109**	**M22-Ma04110**	**M22-Ma04111**
Date Sampled			Mar 01, 2022	Mar 02, 2022	Mar 02, 2022	Mar 01, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
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	%	56	56	54	64
D3-N-MeFOSA (surr.)	1	%	70	45	71	111
D5-N-EtFOSA (surr.)	1	%	69	44	69	94
D7-N-MeFOSE (surr.)	1	%	108	87	114	108
D9-N-EtFOSE (surr.)	1	%	101	85	107	105
D5-N-EtFOSAA (surr.)	1	%	53	72	70	89
D3-N-MeFOSAA (surr.)	1	%	68	76	72	87
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	103	93	96	97
18O2-PFHxS (surr.)	1	%	106	96	99	91
13C8-PFOS (surr.)	1	%	60	78	82	79
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	%	112	118	101	89
13C2-6:2 FTSA (surr.)	1	%	92	88	72	68
13C2-8:2 FTSA (surr.)	1	%	82	83	89	99
13C2-10:2 FTSA (surr.)	1	%	48	66	79	113
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04112**	**M22-Ma04113**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid[C01]		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0
pH (off)	0.1	pH Units	9.4	9.8
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	115	133
13C5-PFPeA (surr.)	1	%	77	83
13C5-PFHxA (surr.)	1	%	72	76
13C4-PFHpA (surr.)	1	%	67	69
13C8-PFOA (surr.)	1	%	73	82
13C5-PFNA (surr.)	1	%	61	71
13C6-PFDA (surr.)	1	%	85	93
13C2-PFUnDA (surr.)	1	%	113	128
13C2-PFDoDA (surr.)	1	%	94	110
13C2-PFTeDA (surr.)	1	%	90	78
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	54	72
D3-N-MeFOSA (surr.)	1	%	83	185
D5-N-EtFOSA (surr.)	1	%	62	156
D7-N-MeFOSE (surr.)	1	%	88	118
D9-N-EtFOSE (surr.)	1	%	81	109
D5-N-EtFOSAA (surr.)	1	%	59	104
D3-N-MeFOSAA (surr.)	1	%	57	89

Client Sample ID			**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04112**	**M22-Ma04113**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	91	92
18O2-PFHxS (surr.)	1	%	92	101
13C8-PFOS (surr.)	1	%	75	88
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	96	79
13C2-6:2 FTSA (surr.)	1	%	57	54
13C2-8:2 FTSA (surr.)	1	%	83	105
13C2-10:2 FTSA (surr.)	1	%	93	109
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 02, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220302052643-Eurofin-21_solid_01
Project ID: JC0927

Order No.:
Report #: 867790
Phone: 08 8338 1009
Fax:

Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220301_20_04_SS_Primary_EUF	Mar 01, 2022	8:04PM	Soil	M22-Ma04105		X	X	X
2	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	Soil	M22-Ma04106		X	X	X
3	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	Soil	M22-Ma04107		X	X	X

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220302052643-Eurofin-21_solid_01
Project ID: JC0927

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Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220301_20_04_SS_Primary_EUF	Mar 01, 2022	8:04PM	AUS Leachate - pH 5.0	M22-Ma04108	X		X	
5	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ma04109	X		X	
6	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma04110	X		X	
7	SX_OB_20220301_20_04_S	Mar 01, 2022	8:04PM	AUS Leachate - Reagent	M22-Ma04111	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
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Project Name: 20220302052643-Eurofin-21_solid_01
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Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
8	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ma04112	X		X	
9	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma04113	X		X	
Test Counts						6	3	9	3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**μg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	79			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	87			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	112			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	109			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	106			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	94			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	80			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	111			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	96			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	96			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	112			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	99			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	90			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	94			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)	%	92			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	71			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	114			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	89			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	78			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	87			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	85			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	99			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	104			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	59			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	125			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	120			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	109			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)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma04110	CP	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)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma04110	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma04110	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma04112	CP	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)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma04112	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma04112	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention: **David Lawson**

Report **867790-S**
Project name 20220302052643-Eurofin-21
Project ID JC0927
Received Date Mar 02, 2022

Client Sample ID			**SX_OB_20220301_20_04_SS_Primary_EUF**	**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Volatile Organics					
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220301_20_04_SS_Primary_EUF	SX_OB_20220302_00_06_SS_Primary_EUF	SX_OB_20220302_04_02_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Volatile Organics					
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	62	70	54
Toluene-d8 (surr.)	1	%	63	73	60
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			**SX_OB_20220301_20_04_SS_Primary_EUF**	**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	52	65	50
p-Terphenyl-d14 (surr.)	1	%	69	68	62
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	58	59	59
Tetrachloro-m-xylene (surr.)	1	%	106	106	100

Client Sample ID			**SX_OB_20220301_20_04_SS_Primary_EUF**	**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Polychlorinated Biphenyls					
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	58	59	59
Tetrachloro-m-xylene (surr.)	1	%	106	106	100
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	53	67	53
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	140	130	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.2	9.0	9.7
% Moisture	1	%	32	31	27
Heavy Metals					
Arsenic	2	mg/kg	40	25	28
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	130	120	100
Copper	5	mg/kg	62	64	54
Lead	5	mg/kg	5.6	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5

Client Sample ID			SX_OB_20220301_20_04_SS_Primary_EUF	SX_OB_20220302_00_06_SS_Primary_EUF	SX_OB_20220302_04_02_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			Mar 01, 2022	Mar 02, 2022	Mar 02, 2022
Test/Reference	LOR	Unit			
Heavy Metals					
Nickel	5	mg/kg	170	170	140
Selenium	2	mg/kg	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10
Zinc	5	mg/kg	120	120	110
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)^{N11}	5	ug/kg	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	119	110	121
13C5-PFPeA (surr.)	1	%	93	79	91
13C5-PFHxA (surr.)	1	%	84	75	83
13C4-PFHpA (surr.)	1	%	88	83	85
13C8-PFOA (surr.)	1	%	91	89	90
13C5-PFNA (surr.)	1	%	57	59	72
13C6-PFDA (surr.)	1	%	65	65	62
13C2-PFUnDA (surr.)	1	%	91	88	91
13C2-PFDoDA (surr.)	1	%	112	100	107
13C2-PFTeDA (surr.)	1	%	91	68	91
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)^{N11}	5	ug/kg	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)^{N11}	5	ug/kg	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)^{N11}	5	ug/kg	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)^{N11}	5	ug/kg	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	5	ug/kg	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	10	ug/kg	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	10	ug/kg	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	74	67	78
D3-N-MeFOSA (surr.)	1	%	79	80	82
D5-N-EtFOSA (surr.)	1	%	86	80	87
D7-N-MeFOSE (surr.)	1	%	84	80	87
D9-N-EtFOSE (surr.)	1	%	75	69	79
D5-N-EtFOSAA (surr.)	1	%	101	86	95
D3-N-MeFOSAA (surr.)	1	%	102	93	85

Client Sample ID			**SX_OB_20220301_20_04_SS_Primary_EUF**	**SX_OB_20220302_00_06_SS_Primary_EUF**	**SX_OB_20220302_04_02_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04105**	**M22-Ma04106**	**M22-Ma04107**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)N11	5	ug/kg	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)N15	5	ug/kg	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)N15	5	ug/kg	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)N15	5	ug/kg	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)N11	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)N15	5	ug/kg	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)N11	5	ug/kg	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)N15	5	ug/kg	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	79	75	82
18O2-PFHxS (surr.)	1	%	92	92	93
13C8-PFOS (surr.)	1	%	68	57	68
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)N11	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)N11	10	ug/kg	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)N11	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)N11	5	ug/kg	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	77	93	79
13C2-6:2 FTSA (surr.)	1	%	75	73	74
13C2-8:2 FTSA (surr.)	1	%	90	84	118
13C2-10:2 FTSA (surr.)	1	%	125	117	125
PFASs Summations					
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 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
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 02, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 02, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-INO-4100 Analysis of Cr6+ by Discrete Analyser			
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 03, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 02, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 02, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220302052643-Eurofin-21_solid_01
Project ID: JC0927

Order No.:
Report #: 867790
Phone: 08 8338 1009
Fax:

Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220301_20_04_SS_Primary_EUF	Mar 01, 2022	8:04PM	Soil	M22-Ma04105		X	X	X
2	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	Soil	M22-Ma04106		X	X	X
3	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	Soil	M22-Ma04107		X	X	X

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Fullarton
SA 5063

Project Name: 20220302052643-Eurofin-21_solid_01
Project ID: JC0927

Order No.:
Report #: 867790
Phone: 08 8338 1009
Fax:

Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220301_20_04_SS_Primary_EUF	Mar 01, 2022	8:04PM	AUS Leachate - pH 5.0	M22-Ma04108	X		X	
5	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ma04109	X		X	
6	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma04110	X		X	
7	SX_OB_20220301_20_04_S	Mar 01, 2022	8:04PM	AUS Leachate - Reagent	M22-Ma04111	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
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Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
8	SX_OB_20220302_00_06_SS_Primary_EUF	Mar 02, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ma04112	X		X	
9	SX_OB_20220302_04_02_SS_Primary_EUF	Mar 02, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma04113	X		X	
Test Counts						6	3	9	3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**μg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Cyanide (total)	mg/kg	< 5			5	Pass	
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							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	114			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16			%	119			70-130	Pass	
LCS - % Recovery									
Cyanide (total)			%	116			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M22-Ma00721	NCP	%	110			70-130	Pass	
TRH >C10-C16	M22-Ma00721	NCP	%	119			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma02679	NCP	%	105			70-130	Pass	
Acenaphthylene	M22-Ma02679	NCP	%	81			70-130	Pass	
Anthracene	M22-Ma02679	NCP	%	74			70-130	Pass	
Benz(a)anthracene	M22-Ma02679	NCP	%	71			70-130	Pass	
Benzo(a)pyrene	M22-Ma02679	NCP	%	106			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma02679	NCP	%	74			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma02679	NCP	%	78			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma02679	NCP	%	72			70-130	Pass	
Chrysene	M22-Ma02679	NCP	%	84			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma02679	NCP	%	73			70-130	Pass	
Fluoranthene	M22-Ma02679	NCP	%	100			70-130	Pass	
Fluorene	M22-Ma02679	NCP	%	78			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma02679	NCP	%	100			70-130	Pass	
Naphthalene	M22-Ma02679	NCP	%	103			70-130	Pass	
Phenanthrene	M22-Ma02679	NCP	%	92			70-130	Pass	
Pyrene	M22-Ma02679	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Fe45791	NCP	%	116			70-130	Pass	
4.4'-DDD	M22-Fe45791	NCP	%	116			70-130	Pass	
4.4'-DDE	M22-Fe45791	NCP	%	103			70-130	Pass	
4.4'-DDT	M22-Fe45791	NCP	%	110			70-130	Pass	
a-HCH	M22-Fe45791	NCP	%	119			70-130	Pass	
Aldrin	M22-Fe45791	NCP	%	127			70-130	Pass	
b-HCH	M22-Fe45791	NCP	%	92			70-130	Pass	
d-HCH	M22-Fe45791	NCP	%	86			70-130	Pass	
Dieldrin	M22-Fe45791	NCP	%	97			70-130	Pass	
Endosulfan I	M22-Fe45791	NCP	%	129			70-130	Pass	
Endosulfan II	M22-Fe45791	NCP	%	89			70-130	Pass	
Endosulfan sulphate	M22-Fe45791	NCP	%	100			70-130	Pass	
Endrin	M22-Fe45791	NCP	%	100			70-130	Pass	
Endrin aldehyde	M22-Fe45791	NCP	%	93			70-130	Pass	
Endrin ketone	M22-Fe45791	NCP	%	105			70-130	Pass	
g-HCH (Lindane)	M22-Fe45791	NCP	%	92			70-130	Pass	
Heptachlor	M22-Fe45791	NCP	%	93			70-130	Pass	
Heptachlor epoxide	M22-Fe45791	NCP	%	123			70-130	Pass	
Hexachlorobenzene	M22-Fe45791	NCP	%	95			70-130	Pass	
Methoxychlor	M22-Fe45791	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Ma00347	NCP	%	100			70-130	Pass	
Aroclor-1260	M22-Ma00347	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Chlorophenol	M22-Ma02679	NCP	%	75			30-130	Pass	
2.4-Dichlorophenol	M22-Ma02679	NCP	%	75			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma02679	NCP	%	79			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma02679	NCP	%	39			30-130	Pass	
2.6-Dichlorophenol	M22-Ma02679	NCP	%	77			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma02679	NCP	%	87			30-130	Pass	
Pentachlorophenol	M22-Ma02679	NCP	%	63			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma02679	NCP	%	32			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma02679	NCP	%	42			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma02679	NCP	%	50			30-130	Pass	
2-Nitrophenol	M22-Ma02679	NCP	%	80			30-130	Pass	
2.4-Dimethylphenol	M22-Ma02679	NCP	%	84			30-130	Pass	
2.4-Dinitrophenol	M22-Ma02679	NCP	%	51			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma02679	NCP	%	71			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma02679	NCP	%	80			30-130	Pass	
4-Nitrophenol	M22-Ma02679	NCP	%	90			30-130	Pass	
Dinoseb	M22-Ma02679	NCP	%	69			30-130	Pass	
Phenol	M22-Ma02679	NCP	%	69			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Fe55443	NCP	%	97			70-130	Pass	
Fluoride (Total)	M22-Ma07394	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Fe57230	NCP	%	92			75-125	Pass	
Cadmium	M22-Fe57230	NCP	%	100			75-125	Pass	
Chromium	M22-Fe57230	NCP	%	100			75-125	Pass	
Copper	M22-Fe57230	NCP	%	99			75-125	Pass	
Lead	M22-Fe57230	NCP	%	101			75-125	Pass	
Mercury	M22-Fe57230	NCP	%	98			75-125	Pass	
Molybdenum	M22-Fe57230	NCP	%	98			75-125	Pass	
Nickel	M22-Fe57230	NCP	%	95			75-125	Pass	
Selenium	M22-Fe57230	NCP	%	90			75-125	Pass	
Silver	M22-Fe57230	NCP	%	100			75-125	Pass	
Tin	M22-Fe57230	NCP	%	98			75-125	Pass	
Zinc	M22-Fe57230	NCP	%	96			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Fe58418	NCP	%	121			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Fe58418	NCP	%	111			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Fe58418	NCP	%	115			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Fe58418	NCP	%	111			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Fe58418	NCP	%	121			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Fe58418	NCP	%	131			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Fe58418	NCP	%	128			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Fe58418	NCP	%	120			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Fe58418	NCP	%	122			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Fe58418	NCP	%	112			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Fe58418	NCP	%	123			50-150	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Fe58418	NCP	%	126			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Fe58418	NCP	%	107			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Fe58418	NCP	%	113			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Fe58418	NCP	%	106			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Fe58418	NCP	%	119			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Fe58418	NCP	%	105			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Fe58418	NCP	%	109			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Fe58418	NCP	%	107			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Fe58418	NCP	%	138			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Fe58418	NCP	%	117			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Fe58418	NCP	%	105			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Fe58418	NCP	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Fe58418	NCP	%	95			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Fe58418	NCP	%	112			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Fe58418	NCP	%	122			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Fe58418	NCP	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Fe58418	NCP	%	132			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Fe58418	NCP	%	125			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Fe58418	NCP	%	119			50-150	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma02746	NCP	%	125			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma04107	CP	%	97			70-130	Pass	
Naphthalene	M22-Ma04107	CP	%	83			70-130	Pass	
TRH C6-C10	M22-Ma04107	CP	%	99			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma04107	CP	%	74			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma04107	CP	%	86			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma04107	CP	%	91			70-130	Pass	
1.2-Dichloroethane	M22-Ma04107	CP	%	84			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzene	M22-Ma04107	CP	%	87			70-130	Pass	
Ethylbenzene	M22-Ma04107	CP	%	79			70-130	Pass	
m&p-Xylenes	M22-Ma04107	CP	%	83			70-130	Pass	
o-Xylene	M22-Ma04107	CP	%	87			70-130	Pass	
Toluene	M22-Ma04107	CP	%	77			70-130	Pass	
Trichloroethene	M22-Ma04107	CP	%	77			70-130	Pass	
Xylenes - Total*	M22-Ma04107	CP	%	84			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma08753	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma02704	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma02704	NCP	mg/kg	1200	1300	11	30%	Pass	
TRH C29-C36	M22-Ma02704	NCP	mg/kg	530	520	1.0	30%	Pass	
Naphthalene	M22-Ma08753	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma08753	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma02704	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma02704	NCP	mg/kg	1500	1600	9.0	30%	Pass	
TRH >C34-C40	M22-Ma02704	NCP	mg/kg	340	340	1.0	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma08753	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Chlorobenzene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma08753	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma08753	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma08753	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma08753	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Fe58104	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma08753	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endosulfan II	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma02681	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma02681	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma02681	NCP	mg/kg	0.6	0.5	31	30%	Fail	Q15
Aroclor-1260	M22-Ma02681	NCP	mg/kg	0.8	0.6	31	30%	Fail	Q15
Total PCB*	M22-Ma02681	NCP	mg/kg	1.4	1.0	31	30%	Fail	Q15
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma02681	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma02681	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma02681	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma02681	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma02681	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma02681	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma02681	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma02681	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma02681	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma02681	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma02681	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma02681	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma02681	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma02681	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma04514	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Cyanide (total)	M22-Fe55442	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma07393	NCP	mg/kg	240	280	15	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Fe53797	NCP	pH Units	6.2	6.2	pass	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Fe57230	NCP	mg/kg	3.5	3.6	3.0	30%	Pass	
Cadmium	M22-Fe57230	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe57230	NCP	mg/kg	11	11	1.0	30%	Pass	
Copper	M22-Fe57230	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	M22-Fe57230	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	M22-Fe57230	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Fe57230	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Fe57230	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Selenium	M22-Fe57230	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe57230	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe57230	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe57230	NCP	mg/kg	< 5	6.2	59	30%	Fail	Q15
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluoroheptanesulfonic acid (PFHpS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Fe57571	NCP	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)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M22-Ma04106	CP	%	31	33	4.0	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Michael Cassidy	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☑ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207
Contact Name	Craig Trimbur David Lawson
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.
Purchase Order	
Quote ID №	Agon WGTP TST
Project №	JC0927
Project Name	20220302100002-Eurofin-6
Project Manager	Craig Trimbur
EDD Format ESdat, EQuIS etc	Esdat
Sampler(s)	Luke Dal Lago
Handed over by	Luke Dal Lago
Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au

Required Turnaround Time (TAT)
Default will be 5 days if not ticked.
♦Surcharge will apply
☐ Overnight (reporting by 9am)♦
☐ Same day ♦ ☐ 1 day ♦
☐ 2 days ♦ ☐ 3
☑ 5 days (Standard)
☐ Other( )

Analyses
Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing

Containers
Change container type & size if necessary.

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220301_08_53_SS_Triplicate_EUF	01.03.2022	S	X	X	X	X	X								0	
2	SX_OB_20220301_09_00_SS_Primary_EUF	01.03.2022	S	X	X	X	X	X									
3	SX_OB_20220301_12_02_SS_Primary_EUF	01.03.2022	S	X	X	X	X	X									
4	SX_OB_20220301_16_31_SS_Duplicate_EUF	01.03.2022	S	X	X	X	X	X									
5	SX_OB_20220301_16_31_SS_Primary_EUF	01.03.2022	S	X	X	X	X	X									
6	SX_OB_20220302_08_15_SS_Triplicate_EUF	02.03.2022	S	X	X	X	X	X									
7	SX_OB_20220302_08_19_SS_Primary_EUF	02.03.2022	S	X	X	X	X	X									
8																	
9																	
10																	
11																	
12																	
13																	
	Total Counts			7	7	7	7	7									

Date/Time
Chilled: Yes [✓ No]
Temp: 25.8
-0.2
Correction: 25.6
Final Temp:

Method of Shipment ☑ Courier (#) ☐ Hand Delivered ☐ Postal | Name: Emma Strong | Signature | Date: 02/03/22 | Time: 10:04

Laboratory Use Only	Received By	Jessica. J	SYD | BNE | [✓ MEL] | PER | ADL | NTL | DRW	Signature		Date	02/03/22	Time	1:22	Temperature	25.6
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №	867796

Jake

Eurofins Environment Testing Australia Pty Ltd

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | Environment Testing Standard Terms and Conditions unless agreed otherwise. A copy is available on request.

QS3009_R10 Modified by: Dr. R Symons Approved by: G. Jackson Approved on: 8 August 2019

eurofins

Environment Testing

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **David Lawson**

Report **867796-L**
Project name 20220302100002-Eurofin-6
Project ID JC0927
Received Date Mar 02, 2022

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma04137**	**M22-Ma04138**	**M22-Ma04139**	**M22-Ma04140**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.2	5.2	5.1	5.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	142	133	127	131
13C5-PFPeA (surr.)	1	%	92	83	91	88
13C5-PFHxA (surr.)	1	%	90	76	85	74
13C4-PFHpA (surr.)	1	%	80	80	75	77
13C8-PFOA (surr.)	1	%	79	59	81	70
13C5-PFNA (surr.)	1	%	66	76	65	68
13C6-PFDA (surr.)	1	%	70	92	78	78
13C2-PFUnDA (surr.)	1	%	77	98	102	96
13C2-PFDoDA (surr.)	1	%	68	92	109	85
13C2-PFTeDA (surr.)	1	%	59	76	89	60
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma04137**	**M22-Ma04138**	**M22-Ma04139**	**M22-Ma04140**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
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	%	59	67	64	60
D3-N-MeFOSA (surr.)	1	%	55	115	122	78
D5-N-EtFOSA (surr.)	1	%	58	107	122	77
D7-N-MeFOSE (surr.)	1	%	100	133	129	111
D9-N-EtFOSE (surr.)	1	%	97	124	126	105
D5-N-EtFOSAA (surr.)	1	%	73	88	82	74
D3-N-MeFOSAA (surr.)	1	%	68	81	82	76
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	81	99	90
18O2-PFHxS (surr.)	1	%	93	93	98	91
13C8-PFOS (surr.)	1	%	69	86	79	76
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	%	109	137	97	129
13C2-6:2 FTSA (surr.)	1	%	89	126	72	135
13C2-8:2 FTSA (surr.)	1	%	89	159	90	107
13C2-10:2 FTSA (surr.)	1	%	65	85	84	68
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220301_16_31_SS_Primary_EUF**	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**	**SX_OB_20220301_08_53_SS_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04141**	**M22-Ma04142**	**M22-Ma04143**	**M22-Ma04144**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	6.0
pH (off)	0.1	pH Units	5.2	5.2	5.2	9.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	130	130	133
13C5-PFPeA (surr.)	1	%	86	91	87	82
13C5-PFHxA (surr.)	1	%	82	79	77	81
13C4-PFHpA (surr.)	1	%	79	73	73	74
13C8-PFOA (surr.)	1	%	79	72	75	77
13C5-PFNA (surr.)	1	%	68	65	68	68
13C6-PFDA (surr.)	1	%	73	81	84	82
13C2-PFUnDA (surr.)	1	%	109	94	105	119
13C2-PFDoDA (surr.)	1	%	92	87	88	106
13C2-PFTeDA (surr.)	1	%	81	64	73	92
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	%	66	63	61	57
D3-N-MeFOSA (surr.)	1	%	120	101	100	101
D5-N-EtFOSA (surr.)	1	%	119	102	97	78
D7-N-MeFOSE (surr.)	1	%	142	121	116	113
D9-N-EtFOSE (surr.)	1	%	131	112	113	106
D5-N-EtFOSAA (surr.)	1	%	77	71	80	91
D3-N-MeFOSAA (surr.)	1	%	69	77	69	89

Client Sample ID			SX_OB_20220301_16_31_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220302_08_19_SS_Primary_EUF	SX_OB_20220301_08_53_SS_Triplicate_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04141**	**M22-Ma04142**	**M22-Ma04143**	**M22-Ma04144**
Date Sampled			Mar 01, 2022	Mar 02, 2022	Mar 02, 2022	Mar 01, 2022
Test/Reference	LOR	Unit				
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	96	95	99	95
18O2-PFHxS (surr.)	1	%	101	95	95	97
13C8-PFOS (surr.)	1	%	72	87	75	75
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	%	113	116	120	88
13C2-6:2 FTSA (surr.)	1	%	80	91	98	69
13C2-8:2 FTSA (surr.)	1	%	87	98	100	90
13C2-10:2 FTSA (surr.)	1	%	86	76	67	92
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220301_09_00_SS_Primary_EUF	SX_OB_20220301_12_02_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Duplicate_EUF	SX_OB_20220301_16_31_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04145**	**M22-Ma04146**	**M22-Ma04147**	**M22-Ma04148**
Date Sampled			Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0	6.0	6.0
pH (off)	0.1	pH Units	9.2	9.1	9.2	9.2

Client Sample ID			SX_OB_20220301_09_00_SS_Primary_EUF	SX_OB_20220301_12_02_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Duplicate_EUF	SX_OB_20220301_16_31_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04145**	**M22-Ma04146**	**M22-Ma04147**	**M22-Ma04148**
Date Sampled			Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	131	129	131
13C5-PFPeA (surr.)	1	%	74	87	75	85
13C5-PFHxA (surr.)	1	%	66	82	68	75
13C4-PFHpA (surr.)	1	%	73	71	67	76
13C8-PFOA (surr.)	1	%	59	74	58	75
13C5-PFNA (surr.)	1	%	71	67	72	74
13C6-PFDA (surr.)	1	%	107	94	91	103
13C2-PFUnDA (surr.)	1	%	137	137	123	145
13C2-PFDoDA (surr.)	1	%	122	120	108	141
13C2-PFTeDA (surr.)	1	%	101	89	73	126
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	%	63	61	63	60
D3-N-MeFOSA (surr.)	1	%	112	98	107	114
D5-N-EtFOSA (surr.)	1	%	88	73	91	93
D7-N-MeFOSE (surr.)	1	%	113	100	112	108
D9-N-EtFOSE (surr.)	1	%	109	93	104	106
D5-N-EtFOSAA (surr.)	1	%	141	126	116	157
D3-N-MeFOSAA (surr.)	1	%	97	96	104	131
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220301_09_00_SS_Primary_EUF	SX_OB_20220301_12_02_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Duplicate_EUF	SX_OB_20220301_16_31_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma04145	M22-Ma04146	M22-Ma04147	M22-Ma04148
Date Sampled			Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorooctanesulfonic acid (PFOS)^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	77	94	83	88
18O2-PFHxS (surr.)	1	%	93	97	95	98
13C8-PFOS (surr.)	1	%	88	82	80	88
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01	< 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	%	119	83	107	111
13C2-6:2 FTSA (surr.)	1	%	157	74	100	108
13C2-8:2 FTSA (surr.)	1	%	146	98	113	114
13C2-10:2 FTSA (surr.)	1	%	112	105	84	115
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220302_08_19_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma04149	M22-Ma04150
Date Sampled			Mar 02, 2022	Mar 02, 2022
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid^{C01}		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0
pH (off)	0.1	pH Units	9.2	9.2
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)^{N11}	0.01	ug/L	< 0.01	< 0.01

Client Sample ID			**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04149**	**M22-Ma04150**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluoroundecanoic acid (PFUnDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	128	134
13C5-PFPeA (surr.)	1	%	80	80
13C5-PFHxA (surr.)	1	%	71	57
13C4-PFHpA (surr.)	1	%	70	77
13C8-PFOA (surr.)	1	%	76	78
13C5-PFNA (surr.)	1	%	68	70
13C6-PFDA (surr.)	1	%	86	94
13C2-PFUnDA (surr.)	1	%	112	131
13C2-PFDoDA (surr.)	1	%	97	128
13C2-PFTeDA (surr.)	1	%	61	111
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	59	59
D3-N-MeFOSA (surr.)	1	%	70	110
D5-N-EtFOSA (surr.)	1	%	56	90
D7-N-MeFOSE (surr.)	1	%	105	117
D9-N-EtFOSE (surr.)	1	%	103	111
D5-N-EtFOSAA (surr.)	1	%	94	94
D3-N-MeFOSAA (surr.)	1	%	89	106
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	92	86
18O2-PFHxS (surr.)	1	%	98	97
13C8-PFOS (surr.)	1	%	81	84

Client Sample ID			**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma04149**	**M22-Ma04150**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)N11	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	86	121
13C2-6:2 FTSA (surr.)	1	%	68	89
13C2-8:2 FTSA (surr.)	1	%	87	99
13C2-10:2 FTSA (surr.)	1	%	89	98
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 02, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 02, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220302100002-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 867796
Phone: 08 8338 1009
Fax:

Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	Soil	M22-Ma04130		X	X	X
2	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	Soil	M22-Ma04131		X	X	X
3	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	Soil	M22-Ma04132		X	X	X

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	Soil	M22-Ma04133		X	X	X
5	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	Soil	M22-Ma04134		X	X	X
6	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	Soil	M22-Ma04135		X	X	X
7	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	Soil	M22-Ma04136		X	X	X

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Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	AUS Leachate - pH 5.0	M22-Ma04137	X		X	
9	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	AUS Leachate - pH 5.0	M22-Ma04138	X		X	
10	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	AUS Leachate - pH 5.0	M22-Ma04139	X		X	

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Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	AUS Leachate - pH 5.0	M22-Ma04140	X		X	
12	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	AUS Leachate - pH 5.0	M22-Ma04141	X		X	
13	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	AUS Leachate - pH 5.0	M22-Ma04142	X		X	
14	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	AUS Leachate - pH 5.0	M22-Ma04143	X		X	

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Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	AUS Leachate - Reagent Water	M22-Ma04144	X		X	
16	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	AUS Leachate - Reagent Water	M22-Ma04145	X		X	
17	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	AUS Leachate - Reagent Water	M22-Ma04146	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220302100002-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 867796
Phone: 08 8338 1009
Fax:

Received: Mar 2, 2022 1:22 PM
Due: Mar 9, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
18	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	AUS Leachate - Reagent Water	M22-Ma04147	X		X	
19	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	AUS Leachate - Reagent Water	M22-Ma04148	X		X	
20	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	AUS Leachate - Reagent Water	M22-Ma04149	X		X	
21	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	AUS Leachate - Reagent	M22-Ma04150	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
Test Counts						14	7	21	7

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	78			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	100			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	113			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	109			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	109			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	92			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	100			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	114			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	106			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	101			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	121			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	101			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	97			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	95			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	91			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	95			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	92			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	120			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	91			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	82			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	103			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	86			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	81			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	97			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	107			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	56			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	129			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)	%	124			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)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma04110	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)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma04110	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma04110	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

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
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **David Lawson**

Report **867796-S**
Project name 20220302100002-Eurofin-6
Project ID JC0927
Received Date Mar 02, 2022

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	58	128	140	98
Toluene-d8 (surr.)	1	%	61	127	147	83
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220301_08_53_SS_Triplicate_EUF	SX_OB_20220301_09_00_SS_Primary_EUF	SX_OB_20220301_12_02_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	81	96	93	87
p-Terphenyl-d14 (surr.)	1	%	107	101	137	134
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	109	135	110	79
Tetrachloro-m-xylene (surr.)	1	%	78	104	70	68

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	109	135	110	79
Tetrachloro-m-xylene (surr.)	1	%	78	104	70	68
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	63	46	60	60
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	200	< 100	250	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.1	8.9	9.0	8.8
% Moisture	1	%	30	34	30	31
Heavy Metals						
Arsenic	2	mg/kg	28	27	30	24
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	130	94
Copper	5	mg/kg	60	78	60	69
Lead	5	mg/kg	5.0	7.2	5.3	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220301_08_53_SS_Triplicate_EUF**	**SX_OB_20220301_09_00_SS_Primary_EUF**	**SX_OB_20220301_12_02_SS_Primary_EUF**	**SX_OB_20220301_16_31_SS_Duplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	160	220	160	210
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	120	160	120	130
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	%	122	117	123	117
13C5-PFPeA (surr.)	1	%	89	79	90	83
13C5-PFHxA (surr.)	1	%	87	77	89	82
13C4-PFHpA (surr.)	1	%	89	79	87	84
13C8-PFOA (surr.)	1	%	95	83	91	94
13C5-PFNA (surr.)	1	%	73	51	56	68
13C6-PFDA (surr.)	1	%	61	51	72	52
13C2-PFUnDA (surr.)	1	%	90	85	90	88
13C2-PFDoDA (surr.)	1	%	112	108	115	111
13C2-PFTeDA (surr.)	1	%	87	81	86	81
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
13C8-FOSA (surr.)	1	%	76	77	76	75
D3-N-MeFOSA (surr.)	1	%	81	79	80	82
D5-N-EtFOSA (surr.)	1	%	88	83	90	86
D7-N-MeFOSE (surr.)	1	%	86	80	86	83
D9-N-EtFOSE (surr.)	1	%	76	76	78	75
D5-N-EtFOSAA (surr.)	1	%	82	95	97	86
D3-N-MeFOSAA (surr.)	1	%	93	96	96	94

Client Sample ID			SX_OB_20220301_08_53_SS_Triplicate_EUF	SX_OB_20220301_09_00_SS_Primary_EUF	SX_OB_20220301_12_02_SS_Primary_EUF	SX_OB_20220301_16_31_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04130**	**M22-Ma04131**	**M22-Ma04132**	**M22-Ma04133**
Date Sampled			**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**	**Mar 01, 2022**
Test/Reference	LOR	Unit				
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	%	81	73	84	76
18O2-PFHxS (surr.)	1	%	98	83	85	87
13C8-PFOS (surr.)	1	%	69	69	55	64
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	%	85	103	84	103
13C2-6:2 FTSA (surr.)	1	%	64	76	79	80
13C2-8:2 FTSA (surr.)	1	%	108	80	86	88
13C2-10:2 FTSA (surr.)	1	%	127	125	124	110
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

Client Sample ID			SX_OB_20220301_16_31_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220302_08_19_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20	< 20	< 20

Client Sample ID			**SX_OB_20220301_16_31_SS_Primary_EUF**	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Volatile Organics					
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID **Sample Matrix** **Eurofins Sample No.** **Date Sampled** Test/Reference	LOR	Unit	**SX_OB_20220301_16_31_SS_Primary_EUF** **Soil** **M22-Ma04134** **Mar 01, 2022**	**SX_OB_20220302_08_15_SS_Triplicate_EUF** **Soil** **M22-Ma04135** **Mar 02, 2022**	**SX_OB_20220302_08_19_SS_Primary_EUF** **Soil** **M22-Ma04136** **Mar 02, 2022**
Volatile Organics					
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	80	129	133
Toluene-d8 (surr.)	1	%	81	121	128
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	91	91	84
p-Terphenyl-d14 (surr.)	1	%	128	109	99

Client Sample ID			SX_OB_20220301_16_31_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220302_08_19_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			Mar 01, 2022	Mar 02, 2022	Mar 02, 2022
Test/Reference	LOR	Unit			
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	82	116	119
Tetrachloro-m-xylene (surr.)	1	%	130	131	126
Polychlorinated Biphenyls					
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	82	116	119
Tetrachloro-m-xylene (surr.)	1	%	130	131	126
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1

Client Sample ID			**SX_OB_20220301_16_31_SS_Primary_EUF**	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	52	50	49
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	120	150	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.1	9.0	8.9
% Moisture	1	%	30	31	22
Heavy Metals					
Arsenic	2	mg/kg	20	39	27
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	150	140
Copper	5	mg/kg	72	96	110
Lead	5	mg/kg	< 5	6.6	5.4
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5
Nickel	5	mg/kg	200	250	260
Selenium	2	mg/kg	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10
Zinc	5	mg/kg	130	170	190
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)^{N11}	5	ug/kg	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	133	130	133
13C5-PFPeA (surr.)	1	%	101	95	92
13C5-PFHxA (surr.)	1	%	91	92	87

Client Sample ID			SX_OB_20220301_16_31_SS_Primary_EUF	SX_OB_20220302_08_15_SS_Triplicate_EUF	SX_OB_20220302_08_19_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
13C4-PFHpA (surr.)	1	%	89	93	95
13C8-PFOA (surr.)	1	%	100	103	105
13C5-PFNA (surr.)	1	%	67	93	56
13C6-PFDA (surr.)	1	%	63	81	64
13C2-PFUnDA (surr.)	1	%	101	92	98
13C2-PFDoDA (surr.)	1	%	129	112	125
13C2-PFTeDA (surr.)	1	%	91	73	84
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	88	78	89
D3-N-MeFOSA (surr.)	1	%	88	85	88
D5-N-EtFOSA (surr.)	1	%	95	89	93
D7-N-MeFOSE (surr.)	1	%	91	86	89
D9-N-EtFOSE (surr.)	1	%	84	74	87
D5-N-EtFOSAA (surr.)	1	%	97	80	113
D3-N-MeFOSAA (surr.)	1	%	118	89	112
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	86	89	87
18O2-PFHxS (surr.)	1	%	95	99	105
13C8-PFOS (surr.)	1	%	70	80	68
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	108	115	117
13C2-6:2 FTSA (surr.)	1	%	90	77	91

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Client Sample ID			**SX_OB_20220301_16_31_SS_Primary_EUF**	**SX_OB_20220302_08_15_SS_Triplicate_EUF**	**SX_OB_20220302_08_19_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma04134**	**M22-Ma04135**	**M22-Ma04136**
Date Sampled			**Mar 01, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
13C2-8:2 FTSA (surr.)	1	%	100	128	92
13C2-10:2 FTSA (surr.)	1	%	134	127	137
PFASs Summations					
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 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
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 02, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 02, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 02, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 03, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 02, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 02, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 02, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name:	Agon Environmental Pty Ltd - VIC	**Order No.:**		**Received:**	Mar 2, 2022 1:22 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	**Report #:**	867796	**Due:**	Mar 9, 2022
		Phone:	08 8338 1009	**Priority:**	5 Day
		Fax:		**Contact Name:**	Agon Lab Reports (Spoil Project)
Project Name:	20220302100002-Eurofin-6				
Project ID:	JC0927				

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	Soil	M22-Ma04130		X	X	X
2	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	Soil	M22-Ma04131		X	X	X
3	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	Soil	M22-Ma04132		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	Soil	M22-Ma04133		X	X	X
5	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	Soil	M22-Ma04134		X	X	X
6	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	Soil	M22-Ma04135		X	X	X
7	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	Soil	M22-Ma04136		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	AUS Leachate - pH 5.0	M22-Ma04137	X		X	
9	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	AUS Leachate - pH 5.0	M22-Ma04138	X		X	
10	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	AUS Leachate - pH 5.0	M22-Ma04139	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	AUS Leachate - pH 5.0	M22-Ma04140	X		X	
12	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	AUS Leachate - pH 5.0	M22-Ma04141	X		X	
13	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	AUS Leachate - pH 5.0	M22-Ma04142	X		X	
14	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	AUS Leachate - pH 5.0	M22-Ma04143	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220301_08_53_SS_Triplicate_EUF	Mar 01, 2022	8:53AM	AUS Leachate - Reagent Water	M22-Ma04144	X		X	
16	SX_OB_20220301_09_00_SS_Primary_EUF	Mar 01, 2022	9:00AM	AUS Leachate - Reagent Water	M22-Ma04145	X		X	
17	SX_OB_20220301_12_02_SS_Primary_EUF	Mar 01, 2022	12:02PM	AUS Leachate - Reagent Water	M22-Ma04146	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
18	SX_OB_20220301_16_31_SS_Duplicate_EUF	Mar 01, 2022	4:31PM	AUS Leachate - Reagent Water	M22-Ma04147	X		X	
19	SX_OB_20220301_16_31_SS_Primary_EUF	Mar 01, 2022	4:31PM	AUS Leachate - Reagent Water	M22-Ma04148	X		X	
20	SX_OB_20220302_08_15_SS_Triplicate_EUF	Mar 02, 2022	8:15AM	AUS Leachate - Reagent Water	M22-Ma04149	X		X	
21	SX_OB_20220302_08_19_S	Mar 02, 2022	8:19AM	AUS Leachate - Reagent	M22-Ma04150	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
Test Counts						14	7	21	7

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	112			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
TRH C6-C10	%	95			70-130	Pass	
TRH >C10-C16	%	115			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	85			70-130	Pass	
1.1.1-Trichloroethane	%	82			70-130	Pass	
1.2-Dichlorobenzene	%	84			70-130	Pass	
1.2-Dichloroethane	%	82			70-130	Pass	
Benzene	%	86			70-130	Pass	
Ethylbenzene	%	90			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	98			70-130	Pass	
Toluene	%	100			70-130	Pass	
Trichloroethene	%	98			70-130	Pass	
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	112			70-130	Pass	
Acenaphthylene	%	118			70-130	Pass	
Anthracene	%	93			70-130	Pass	
Benz(a)anthracene	%	80			70-130	Pass	
Benzo(a)pyrene	%	98			70-130	Pass	
Benzo(b&j)fluoranthene	%	77			70-130	Pass	
Benzo(g.h.i)perylene	%	105			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	117			70-130	Pass	
Dibenz(a.h)anthracene	%	94			70-130	Pass	
Fluoranthene	%	91			70-130	Pass	
Fluorene	%	106			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	86			70-130	Pass	
Pyrene	%	102			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	108			70-130	Pass	
4.4'-DDD	%	116			70-130	Pass	
4.4'-DDE	%	119			70-130	Pass	
4.4'-DDT	%	99			70-130	Pass	
a-HCH	%	81			70-130	Pass	
Aldrin	%	112			70-130	Pass	
b-HCH	%	122			70-130	Pass	
d-HCH	%	97			70-130	Pass	
Dieldrin	%	121			70-130	Pass	
Endosulfan I	%	99			70-130	Pass	
Endosulfan II	%	96			70-130	Pass	
Endosulfan sulphate	%	119			70-130	Pass	
Endrin	%	125			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	106			70-130	Pass	
g-HCH (Lindane)	%	100			70-130	Pass	
Heptachlor	%	123			70-130	Pass	
Heptachlor epoxide	%	111			70-130	Pass	
Hexachlorobenzene	%	90			70-130	Pass	
Methoxychlor	%	116			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	79			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	76			25-140	Pass	
2.4-Dichlorophenol	%	96			25-140	Pass	
2.4.5-Trichlorophenol	%	80			25-140	Pass	
2.4.6-Trichlorophenol	%	97			25-140	Pass	
2.6-Dichlorophenol	%	89			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	113			25-140	Pass	
Pentachlorophenol	%	122			25-140	Pass	
Tetrachlorophenols - Total	%	72			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	44			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	49			25-140	Pass	
2-Nitrophenol	%	96			25-140	Pass	
2.4-Dimethylphenol	%	119			25-140	Pass	
2.4-Dinitrophenol	%	41			25-140	Pass	
2-Methylphenol (o-Cresol)	%	89			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	118			25-140	Pass	
4-Nitrophenol	%	112			25-140	Pass	
Dinoseb	%	60			25-140	Pass	
Phenol	%	77			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	99			70-130	Pass	
Cyanide (total)	%	116			70-130	Pass	
Fluoride (Total)	%	100			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			80-120	Pass	
Cadmium	%	85			80-120	Pass	
Chromium	%	111			80-120	Pass	
Copper	%	104			80-120	Pass	
Lead	%	106			80-120	Pass	
Mercury	%	94			80-120	Pass	
Molybdenum	%	100			80-120	Pass	
Nickel	%	98			80-120	Pass	
Selenium	%	100			80-120	Pass	
Silver	%	86			80-120	Pass	
Tin	%	97			80-120	Pass	
Zinc	%	102			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	98			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	107			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	114			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	117			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	130			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	133			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	114			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	128			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	127			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	143			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	126			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	127			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	116			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	114			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	110			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	115			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	99			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	108			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	108			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	133			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	120			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	119			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	67			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	108			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	74			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	127			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	122			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	122			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Fe57370	NCP	%	84			70-130	Pass	
Naphthalene	M22-Fe57370	NCP	%	74			70-130	Pass	
TRH C6-C10	M22-Fe57370	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Fe57370	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	M22-Fe57370	NCP	%	88			70-130	Pass	
1.2-Dichlorobenzene	M22-Fe57370	NCP	%	111			70-130	Pass	
1.2-Dichloroethane	M22-Fe57370	NCP	%	79			70-130	Pass	
Benzene	M22-Fe57370	NCP	%	81			70-130	Pass	
Ethylbenzene	M22-Fe57370	NCP	%	93			70-130	Pass	
m&p-Xylenes	M22-Fe57370	NCP	%	85			70-130	Pass	
o-Xylene	M22-Fe57370	NCP	%	81			70-130	Pass	
Toluene	M22-Fe57370	NCP	%	74			70-130	Pass	
Trichloroethene	M22-Fe57370	NCP	%	86			70-130	Pass	
Xylenes - Total*	M22-Fe57370	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Fe55380	NCP	%	98			70-130	Pass	
Acenaphthylene	M22-Fe55380	NCP	%	105			70-130	Pass	
Anthracene	M22-Fe55380	NCP	%	102			70-130	Pass	
Benz(a)anthracene	M22-Fe55380	NCP	%	90			70-130	Pass	
Benzo(a)pyrene	M22-Fe55380	NCP	%	94			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Fe55380	NCP	%	75			70-130	Pass	
Benzo(g.h.i)perylene	M22-Fe55380	NCP	%	117			70-130	Pass	
Benzo(k)fluoranthene	M22-Fe55380	NCP	%	97			70-130	Pass	
Chrysene	M22-Fe55380	NCP	%	106			70-130	Pass	
Dibenz(a.h)anthracene	M22-Fe55380	NCP	%	99			70-130	Pass	
Fluoranthene	M22-Fe55380	NCP	%	119			70-130	Pass	
Fluorene	M22-Fe55380	NCP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe55380	NCP	%	115			70-130	Pass	
Naphthalene	M22-Fe55380	NCP	%	90			70-130	Pass	
Phenanthrene	M22-Fe55380	NCP	%	92			70-130	Pass	
Pyrene	M22-Fe55380	NCP	%	128			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Fe53201	NCP	%	93			70-130	Pass	
4.4'-DDD	M22-Fe53201	NCP	%	103			70-130	Pass	
4.4'-DDE	M22-Fe53201	NCP	%	87			70-130	Pass	
4.4'-DDT	M22-Fe53201	NCP	%	106			70-130	Pass	
a-HCH	M22-Fe53201	NCP	%	96			70-130	Pass	
Aldrin	M22-Fe53201	NCP	%	92			70-130	Pass	
b-HCH	M22-Fe53201	NCP	%	106			70-130	Pass	
d-HCH	M22-Fe53201	NCP	%	108			70-130	Pass	
Dieldrin	M22-Fe53201	NCP	%	90			70-130	Pass	
Endosulfan I	M22-Fe53201	NCP	%	81			70-130	Pass	
Endosulfan II	M22-Fe53201	NCP	%	91			70-130	Pass	
Endosulfan sulphate	M22-Fe53201	NCP	%	80			70-130	Pass	
Endrin	M22-Fe53201	NCP	%	85			70-130	Pass	
Endrin aldehyde	M22-Fe53201	NCP	%	78			70-130	Pass	
Endrin ketone	M22-Fe53201	NCP	%	84			70-130	Pass	
g-HCH (Lindane)	M22-Fe53201	NCP	%	112			70-130	Pass	
Heptachlor	M22-Fe53201	NCP	%	85			70-130	Pass	
Heptachlor epoxide	M22-Fe53201	NCP	%	89			70-130	Pass	
Hexachlorobenzene	M22-Fe53201	NCP	%	97			70-130	Pass	
Methoxychlor	M22-Fe53201	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Fe53863	NCP	%	85			70-130	Pass	
Aroclor-1260	M22-Fe53863	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Fe55380	NCP	%	86			30-130	Pass	
2.4-Dichlorophenol	M22-Fe55380	NCP	%	93			30-130	Pass	
2.4.5-Trichlorophenol	M22-Fe55380	NCP	%	85			30-130	Pass	
2.4.6-Trichlorophenol	M22-Fe55380	NCP	%	79			30-130	Pass	
2.6-Dichlorophenol	M22-Fe55380	NCP	%	86			30-130	Pass	
4-Chloro-3-methylphenol	M22-Fe55380	NCP	%	92			30-130	Pass	
Pentachlorophenol	M22-Fe55380	NCP	%	50			30-130	Pass	
Tetrachlorophenols - Total	M22-Fe55380	NCP	%	73			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Fe55380	NCP	%	26			30-130	Fail	Q08
2-Methyl-4.6-dinitrophenol	M22-Fe55380	NCP	%	40			30-130	Pass	
2-Nitrophenol	M22-Fe55380	NCP	%	88			30-130	Pass	
2.4-Dimethylphenol	M22-Fe55380	NCP	%	106			30-130	Pass	
2.4-Dinitrophenol	M22-Fe55380	NCP	%	55			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Fe55380	NCP	%	76			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Fe55380	NCP	%	102			30-130	Pass	
4-Nitrophenol	M22-Fe55380	NCP	%	74			30-130	Pass	
Dinoseb	M22-Fe55380	NCP	%	56			30-130	Pass	
Phenol	M22-Fe55380	NCP	%	81			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Fe55443	NCP	%	97			70-130	Pass	
Fluoride (Total)	M22-Ma02707	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic	M22-Ma02716	NCP	%	78			75-125	Pass	
Cadmium	M22-Ma02716	NCP	%	92			75-125	Pass	
Chromium	M22-Ma02716	NCP	%	71			75-125	Fail	Q08
Copper	M22-Ma02716	NCP	%	79			75-125	Pass	
Lead	M22-Ma02716	NCP	%	83			75-125	Pass	
Mercury	M22-Ma02716	NCP	%	89			75-125	Pass	
Molybdenum	M22-Ma02716	NCP	%	85			75-125	Pass	
Nickel	M22-Ma02716	NCP	%	79			75-125	Pass	
Selenium	M22-Ma02716	NCP	%	75			75-125	Pass	
Silver	M22-Ma02716	NCP	%	91			75-125	Pass	
Tin	M22-Ma02716	NCP	%	84			75-125	Pass	
Zinc	M22-Ma02716	NCP	%	79			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Fe57572	NCP	%	118			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Fe57572	NCP	%	102			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Fe57572	NCP	%	98			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Fe57572	NCP	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Fe57572	NCP	%	107			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Fe57572	NCP	%	118			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Fe57572	NCP	%	107			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Fe57572	NCP	%	111			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Fe57572	NCP	%	111			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Fe57572	NCP	%	127			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Fe57572	NCP	%	114			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Fe57572	NCP	%	113			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Fe57572	NCP	%	103			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Fe57572	NCP	%	96			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Fe57572	NCP	%	96			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Fe57572	NCP	%	104			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Fe57572	NCP	%	97			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Fe57572	NCP	%	101			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Fe57572	NCP	%	93			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Fe57572	NCP	%	132			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Fe57572	NCP	%	105			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Fe57572	NCP	%	95			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Fe57572	NCP	%	97			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Fe57572	NCP	%	64			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanesulfonic acid (PFOS)	M22-Fe57572	NCP	%	96			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Fe57572	NCP	%	72			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Fe57572	NCP	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Fe57572	NCP	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Fe57572	NCP	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Fe57572	NCP	%	111			50-150	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma04131	CP	%	100			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M22-Ma04135	CP	%	113			70-130	Pass	
TRH >C10-C16	M22-Ma04135	CP	%	124			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma02056	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma02056	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Allyl chloride	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma02056	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma02056	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma02056	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma02056	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma02056	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma02056	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma02056	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Fe58387	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Fe58387	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Fe58387	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Fe58387	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Fe58387	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Fe58387	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Fe58387	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Fe58387	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Fe58387	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Fe58387	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Fe58387	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Fe58387	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Fe58387	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Fe58387	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Fe58387	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Fe58387	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Fe55268	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma07393	NCP	mg/kg	240	280	15	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Fe53806	NCP	pH Units	7.4	7.6	pass	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma02031	NCP	mg/kg	12	13	3.0	30%	Pass	
Cadmium	M22-Ma02031	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma02031	NCP	mg/kg	54	53	1.0	30%	Pass	
Copper	M22-Ma02031	NCP	mg/kg	39	39	1.0	30%	Pass	
Lead	M22-Ma02031	NCP	mg/kg	81	82	1.0	30%	Pass	
Mercury	M22-Ma02031	NCP	mg/kg	0.1	0.1	3.0	30%	Pass	
Molybdenum	M22-Ma02031	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma02031	NCP	mg/kg	45	45	<1	30%	Pass	
Selenium	M22-Ma02031	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma02031	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma02031	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma02031	NCP	mg/kg	170	170	2.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Fe57571	NCP	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)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Fe57571	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Ma04134	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma04134	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma04134	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-Ma04134	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma04134	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma04134	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma04134	CP	mg/kg	< 1	< 1	<1	30%	Pass	
% Moisture	M22-Ma04134	CP	%	30	28	10	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Michael Cassidy	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☑ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing	**Project №**	JC0927	**Project Manager**	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	**Project Name**	20220303091354-Eurofin-6	**EDD Format** (ESdat, EQuIS, etc)	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.				
Purchase Order					
Quote ID №	Agon WGTP TST				

Sampler(s)	Hannah Kennedy - EP Risk
Handed over by	Hannah Kennedy - EP Risk
Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au

Analyses
Where metals are requested, please specify "Total" or "Filtered"
SUITE codes must be used to attract SUITE pricing

Containers
Change container type & size if necessary

Required Turnaround Time (TAT)
Default will be 5 days if not ticked

♦Surcharge will apply
☐ Overnight (reporting by 9am)♦
☐ Same day ♦ ☐ 1 day ♦
☐ 2 days ♦ ☑ 3
☐ 5 days (Standard)
☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220303_08_09_Triplicate_EUF	3/03/22	S	✗	✗	✗	✗	✗								1	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
	Total Counts			1	1	1	1	1								1	

Date/Time
Chilled: Yes / [✓ No]
Temp: 27.0
-5.2
26.8°C
Correction
Final Temp

Method of Shipment	☑ Courier (#) ☐ Hand Delivered ☐ Postal	Name	Hannah	Signature		Date	3/3/22	Time	
Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature	Date	Time	Temperature 26.8°C Jake
	Received By	L Dugey	SYD | BNE | [✓ MEL] | PER | ADL | NTL | DRW	Signature	Date 3:52PM	Time 3/3/22	Report № 868272

Eurofins Environment Testing Australia Pty Ltd

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | Environment Testing Standard Terms and Conditions unless agreed otherwise. A copy is available on request.

QS3009_R10 Modified by: Dr. R Symons Approved by: G. Jackson Approved on: 8 August 2019

Sample Receipt Advice

Company name:	Agon Environmental Pty Ltd - VIC
Contact name:	Agon Lab Reports (Spoil Project)
Project name:	20220303091354-Eurofin-6
Project ID:	JC0927
Turnaround time:	3 Day
Date/Time received	Mar 3, 2022 3:52 PM
Eurofins reference	868272

Sample Information

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

Notes

Contact

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

Michael Cassidy on phone : +61 3 8564 5000 or by email: MichaelCassidy@eurofins.com

Results will be delivered electronically via email to Agon Lab Reports (Spoil Project) - labreports.TST@agonenviro.com.au.

Note: A copy of these results will also be delivered to the general Agon Environmental Pty Ltd - VIC email address.

Global Leader - Results you can trust

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220303091354-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 868272
Phone: 08 8338 1009
Fax:

Received: Mar 3, 2022 3:52 PM
Due: Mar 8, 2022
Priority: 3 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	Soil	M22-Ma07385		X	X	X
2	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - pH 5.0	M22-Ma07386	X		X	
3	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - Reagent Water	M22-Ma07387	X		X	
Test Counts						2	1	3	1

eurofins | Environment Testing

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

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.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention: **Agon Lab Reports (Spoil Project)**

Report **868272-L**
Project name 20220303091354-Eurofin-6
Project ID JC0927
Received Date Mar 03, 2022

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**	**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07386**	**M22-Ma07387**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid[C01]		comment	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	6.1
pH (off)	0.1	pH Units	5.4	9.5
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	119	88
13C5-PFPeA (surr.)	1	%	105	68
13C5-PFHxA (surr.)	1	%	81	64
13C4-PFHpA (surr.)	1	%	90	76
13C8-PFOA (surr.)	1	%	93	85
13C5-PFNA (surr.)	1	%	82	80
13C6-PFDA (surr.)	1	%	87	103
13C2-PFUnDA (surr.)	1	%	131	186
13C2-PFDoDA (surr.)	1	%	111	175
13C2-PFTeDA (surr.)	1	%	78	103
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**	**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07386**	**M22-Ma07387**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	93	105
D3-N-MeFOSA (surr.)	1	%	155	102
D5-N-EtFOSA (surr.)	1	%	143	87
D7-N-MeFOSE (surr.)	1	%	133	122
D9-N-EtFOSE (surr.)	1	%	131	122
D5-N-EtFOSAA (surr.)	1	%	67	121
D3-N-MeFOSAA (surr.)	1	%	77	167
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	79	91
18O2-PFHxS (surr.)	1	%	95	101
13C8-PFOS (surr.)	1	%	85	107
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	83	67
13C2-6:2 FTSA (surr.)	1	%	110	71
13C2-8:2 FTSA (surr.)	1	%	65	71
13C2-10:2 FTSA (surr.)	1	%	133	101
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 03, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220303091354-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 868272
Phone: 08 8338 1009
Fax:

Received: Mar 3, 2022 3:52 PM
Due: Mar 8, 2022
Priority: 3 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	Soil	M22-Ma07385		X	X	X
2	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - pH 5.0	M22-Ma07386	X		X	
3	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - Reagent Water	M22-Ma07387	X		X	
Test Counts						2	1	3	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	63			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	85			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	109			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	94			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	101			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	113			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	98			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	106			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	122			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	91			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	94			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	79			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	91			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	82			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	81			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	104			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	83			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	64			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	94			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	87			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	80			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	88			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	92			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	59			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)	%	125			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	79			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	117			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)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07310	NCP	ug/L	0.03	0.03	3.0	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07310	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)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07310	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07310	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Catherine Wilson	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Agon Lab Reports (Spoil Project)**

Report **868272-S**
Project name 20220303091354-Eurofin-6
Project ID JC0927
Received Date Mar 03, 2022

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07385**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07385**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Volatile Organics			
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	60
Toluene-d8 (surr.)	1	%	58
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07385**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	111
p-Terphenyl-d14 (surr.)	1	%	91
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	108
Tetrachloro-m-xylene (surr.)	1	%	112

Client Sample ID			SX_OB_20220303_08_09_Triplicate_EUF
Sample Matrix			Soil
Eurofins Sample No.			M22-Ma07385
Date Sampled			Mar 03, 2022
Test/Reference	LOR	Unit	
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	108
Tetrachloro-m-xylene (surr.)	1	%	112
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	59
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	110
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9
% Moisture	1	%	33
Heavy Metals			
Arsenic	2	mg/kg	23
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	110
Copper	5	mg/kg	71
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Molybdenum	5	mg/kg	< 5

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07385**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Heavy Metals			
Nickel	5	mg/kg	170
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	130
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	111
13C5-PFPeA (surr.)	1	%	94
13C5-PFHxA (surr.)	1	%	88
13C4-PFHpA (surr.)	1	%	78
13C8-PFOA (surr.)	1	%	73
13C5-PFNA (surr.)	1	%	65
13C6-PFDA (surr.)	1	%	60
13C2-PFUnDA (surr.)	1	%	103
13C2-PFDoDA (surr.)	1	%	98
13C2-PFTeDA (surr.)	1	%	64
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	72
D3-N-MeFOSA (surr.)	1	%	101
D5-N-EtFOSA (surr.)	1	%	115
D7-N-MeFOSE (surr.)	1	%	89
D9-N-EtFOSE (surr.)	1	%	89
D5-N-EtFOSAA (surr.)	1	%	120
D3-N-MeFOSAA (surr.)	1	%	88

Client Sample ID			**SX_OB_20220303_08_09_Triplicate_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07385**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)^{N11}	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)^{N15}	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)^{N15}	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)^{N15}	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)^{N11}	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)^{N11}	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)^{N15}	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	78
18O2-PFHxS (surr.)	1	%	71
13C8-PFOS (surr.)	1	%	57
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)^{N11}	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)^{N11}	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	76
13C2-6:2 FTSA (surr.)	1	%	99
13C2-8:2 FTSA (surr.)	1	%	97
13C2-10:2 FTSA (surr.)	1	%	108
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 04, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 04, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 04, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 04, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 03, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 03, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name:	Agon Environmental Pty Ltd - VIC	**Order No.:**		**Received:**	Mar 3, 2022 3:52 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	**Report #:**	868272	**Due:**	Mar 8, 2022
		Phone:	08 8338 1009	**Priority:**	3 Day
		Fax:		**Contact Name:**	Agon Lab Reports (Spoil Project)
Project Name:	20220303091354-Eurofin-6				
Project ID:	JC0927				

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	Soil	M22-Ma07385		X	X	X
2	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - pH 5.0	M22-Ma07386	X		X	
3	SX_OB_20220303_08_09_Triplicate_EUF	Mar 03, 2022	8:09AM	AUS Leachate - Reagent Water	M22-Ma07387	X		X	
Test Counts						2	1	3	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**μg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	79			70-130	Pass	
TRH C10-C14	%	103			70-130	Pass	
Naphthalene	%	84			70-130	Pass	
TRH C6-C10	%	79			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	77			70-130	Pass	
1.1.1-Trichloroethane	%	82			70-130	Pass	
1.2-Dichlorobenzene	%	99			70-130	Pass	
1.2-Dichloroethane	%	97			70-130	Pass	
Benzene	%	97			70-130	Pass	
Ethylbenzene	%	95			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	96			70-130	Pass	
Toluene	%	96			70-130	Pass	
Trichloroethene	%	96			70-130	Pass	
Xylenes - Total*	%	98			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	96			70-130	Pass	
Acenaphthylene	%	125			70-130	Pass	
Anthracene	%	113			70-130	Pass	
Benz(a)anthracene	%	102			70-130	Pass	
Benzo(a)pyrene	%	107			70-130	Pass	
Benzo(b&j)fluoranthene	%	86			70-130	Pass	
Benzo(g.h.i)perylene	%	119			70-130	Pass	
Benzo(k)fluoranthene	%	101			70-130	Pass	
Chrysene	%	95			70-130	Pass	
Dibenz(a.h)anthracene	%	90			70-130	Pass	
Fluoranthene	%	74			70-130	Pass	
Fluorene	%	104			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	122			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	102			70-130	Pass	
Pyrene	%	114			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	85			70-130	Pass	
4.4'-DDD	%	128			70-130	Pass	
4.4'-DDE	%	72			70-130	Pass	
4.4'-DDT	%	116			70-130	Pass	
a-HCH	%	106			70-130	Pass	
Aldrin	%	100			70-130	Pass	
b-HCH	%	86			70-130	Pass	
d-HCH	%	79			70-130	Pass	
Dieldrin	%	83			70-130	Pass	
Endosulfan I	%	103			70-130	Pass	
Endosulfan II	%	81			70-130	Pass	
Endosulfan sulphate	%	86			70-130	Pass	
Endrin	%	97			70-130	Pass	
Endrin aldehyde	%	76			70-130	Pass	
Endrin ketone	%	77			70-130	Pass	
g-HCH (Lindane)	%	103			70-130	Pass	
Heptachlor	%	76			70-130	Pass	
Heptachlor epoxide	%	74			70-130	Pass	
Hexachlorobenzene	%	106			70-130	Pass	
Methoxychlor	%	107			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	110			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	129			25-140	Pass	
2.4-Dichlorophenol	%	76			25-140	Pass	
2.4.5-Trichlorophenol	%	69			25-140	Pass	
2.4.6-Trichlorophenol	%	73			25-140	Pass	
2.6-Dichlorophenol	%	66			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	88			25-140	Pass	
Pentachlorophenol	%	65			25-140	Pass	
Tetrachlorophenols - Total	%	53			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	69			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	69			25-140	Pass	
2-Nitrophenol	%	72			25-140	Pass	
2.4-Dimethylphenol	%	79			25-140	Pass	
2.4-Dinitrophenol	%	53			25-140	Pass	
2-Methylphenol (o-Cresol)	%	73			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	82			25-140	Pass	
4-Nitrophenol	%	86			25-140	Pass	
Dinoseb	%	34			25-140	Pass	
Phenol	%	124			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	98			70-130	Pass	
Cyanide (total)	%	123			70-130	Pass	
Fluoride (Total)	%	100			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	112			80-120	Pass	
Cadmium	%	109			80-120	Pass	
Chromium	%	116			80-120	Pass	
Copper	%	115			80-120	Pass	
Lead	%	120			80-120	Pass	
Mercury	%	103			80-120	Pass	
Molybdenum	%	111			80-120	Pass	
Nickel	%	110			80-120	Pass	
Selenium	%	113			80-120	Pass	
Silver	%	110			80-120	Pass	
Tin	%	109			80-120	Pass	
Zinc	%	117			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	119			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	115			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	107			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	109			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	118			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	102			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	107			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	121			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	122			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	94			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	124			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	116			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	115			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	106			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)	%	98			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	89			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	102			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	102			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	115			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	109			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	103			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	98			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	65			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	97			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	119			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	102			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	115			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	114			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	105			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma02719	NCP	%	87			70-130	Pass	
TRH C10-C14	L22-Ma07574	NCP	%	117			70-130	Pass	
Naphthalene	M22-Ma02719	NCP	%	74			70-130	Pass	
TRH C6-C10	M22-Ma02719	NCP	%	85			70-130	Pass	
TRH >C10-C16	L22-Ma07574	NCP	%	116			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma02719	NCP	%	76			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma02719	NCP	%	74			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma02719	NCP	%	91			70-130	Pass	
1.2-Dichloroethane	M22-Ma02719	NCP	%	95			70-130	Pass	
Benzene	M22-Ma02719	NCP	%	89			70-130	Pass	
Ethylbenzene	M22-Ma02719	NCP	%	90			70-130	Pass	
m&p-Xylenes	M22-Ma02719	NCP	%	92			70-130	Pass	
o-Xylene	M22-Ma02719	NCP	%	96			70-130	Pass	
Toluene	M22-Ma02719	NCP	%	91			70-130	Pass	
Trichloroethene	M22-Ma02719	NCP	%	87			70-130	Pass	
Xylenes - Total*	M22-Ma02719	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma09946	NCP	%	88			70-130	Pass	
Acenaphthylene	M22-Ma09946	NCP	%	101			70-130	Pass	
Anthracene	M22-Ma09946	NCP	%	87			70-130	Pass	
Benz(a)anthracene	M22-Ma09946	NCP	%	74			70-130	Pass	
Benzo(a)pyrene	M22-Ma09946	NCP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma09946	NCP	%	103			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma09946	NCP	%	97			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma09946	NCP	%	100			70-130	Pass	
Chrysene	M22-Ma09946	NCP	%	92			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma09946	NCP	%	103			70-130	Pass	
Fluoranthene	M22-Ma09946	NCP	%	106			70-130	Pass	
Fluorene	M22-Ma09946	NCP	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma09946	NCP	%	91			70-130	Pass	
Naphthalene	M22-Ma09946	NCP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenanthrene	M22-Ma09946	NCP	%	76			70-130	Pass	
Pyrene	M22-Ma09946	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Ma02585	NCP	%	96			70-130	Pass	
4.4'-DDD	M22-Ma02585	NCP	%	86			70-130	Pass	
4.4'-DDE	M22-Ma02585	NCP	%	115			70-130	Pass	
4.4'-DDT	M22-Ma02585	NCP	%	98			70-130	Pass	
a-HCH	M22-Ma02585	NCP	%	92			70-130	Pass	
Aldrin	M22-Ma02585	NCP	%	94			70-130	Pass	
b-HCH	M22-Ma02585	NCP	%	98			70-130	Pass	
d-HCH	M22-Ma02585	NCP	%	124			70-130	Pass	
Dieldrin	M22-Ma02585	NCP	%	99			70-130	Pass	
Endosulfan I	M22-Ma02585	NCP	%	108			70-130	Pass	
Endosulfan II	M22-Ma02585	NCP	%	102			70-130	Pass	
Endosulfan sulphate	M22-Ma02585	NCP	%	105			70-130	Pass	
Endrin	M22-Ma02585	NCP	%	122			70-130	Pass	
Endrin aldehyde	M22-Ma02585	NCP	%	118			70-130	Pass	
Endrin ketone	M22-Ma02585	NCP	%	109			70-130	Pass	
g-HCH (Lindane)	M22-Ma02585	NCP	%	87			70-130	Pass	
Heptachlor	M22-Ma02585	NCP	%	100			70-130	Pass	
Heptachlor epoxide	M22-Ma02585	NCP	%	93			70-130	Pass	
Hexachlorobenzene	M22-Ma02585	NCP	%	120			70-130	Pass	
Methoxychlor	M22-Ma02585	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma09946	NCP	%	77			30-130	Pass	
2.4-Dichlorophenol	M22-Ma09946	NCP	%	70			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma09946	NCP	%	69			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma09946	NCP	%	79			30-130	Pass	
2.6-Dichlorophenol	M22-Ma09946	NCP	%	63			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma09946	NCP	%	76			30-130	Pass	
Pentachlorophenol	M22-Ma09946	NCP	%	49			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma09946	NCP	%	53			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma09946	NCP	%	55			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma09946	NCP	%	34			30-130	Pass	
2-Nitrophenol	M22-Ma09946	NCP	%	68			30-130	Pass	
2.4-Dimethylphenol	M22-Ma09946	NCP	%	78			30-130	Pass	
2.4-Dinitrophenol	M22-Ma09946	NCP	%	51			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma09946	NCP	%	66			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma09946	NCP	%	75			30-130	Pass	
4-Nitrophenol	M22-Ma09946	NCP	%	57			30-130	Pass	
Dinoseb	M22-Ma09946	NCP	%	31			30-130	Pass	
Phenol	M22-Ma09946	NCP	%	74			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Fe57837	NCP	%	93			70-130	Pass	
Cyanide (total)	M22-Ma07275	NCP	%	82			70-130	Pass	
Fluoride (Total)	M22-Ma07394	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma00327	NCP	%	100			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cadmium	M22-Ma00327	NCP	%	109			75-125	Pass	
Chromium	M22-Ma00327	NCP	%	108			75-125	Pass	
Copper	M22-Ma00327	NCP	%	111			75-125	Pass	
Lead	M22-Ma02481	NCP	%	99			75-125	Pass	
Mercury	M22-Ma00327	NCP	%	93			75-125	Pass	
Molybdenum	M22-Ma00327	NCP	%	106			75-125	Pass	
Nickel	M22-Ma00327	NCP	%	112			75-125	Pass	
Selenium	M22-Ma00327	NCP	%	95			75-125	Pass	
Silver	M22-Ma00327	NCP	%	107			75-125	Pass	
Tin	M22-Ma00327	NCP	%	95			75-125	Pass	
Zinc	M22-Ma02481	NCP	%	75			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07791	NCP	%	102			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07791	NCP	%	110			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07791	NCP	%	108			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07791	NCP	%	123			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07791	NCP	%	117			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07791	NCP	%	113			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07791	NCP	%	119			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07791	NCP	%	117			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma07791	NCP	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07791	NCP	%	105			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07791	NCP	%	97			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07791	NCP	%	95			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07791	NCP	%	98			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07791	NCP	%	90			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07791	NCP	%	88			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07791	NCP	%	93			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07791	NCP	%	108			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07791	NCP	%	99			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07791	NCP	%	111			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07791	NCP	%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07791	NCP	%	78			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07791	NCP	%	112			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma07791	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07791	NCP	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07791	NCP	%	122			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07791	NCP	%	106			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Fe57374	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	L22-Ma07573	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	L22-Ma07573	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	L22-Ma07573	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Fe57374	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	L22-Ma07573	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	L22-Ma07573	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	L22-Ma07573	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Benzene	M22-Fe57374	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Fe57374	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Fe57374	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Fe57374	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Fe57374	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Fe57374	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Fe57374	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma05626	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma05626	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma11323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma11323	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma11323	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma11323	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma11323	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma11323	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma11323	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma11323	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma11323	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma11323	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma11323	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma11323	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma11323	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma11323	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma11323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma02485	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Cyanide (total)	B22-Ma04980	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma07393	NCP	mg/kg	240	280	15	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	B22-Ma08701	NCP	pH Units	7.4	7.5	pass	30%	Pass	
% Moisture	M22-Ma07385	CP	%	33	33	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	M22-Ma00336	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma00336	NCP	mg/kg	23	22	3.0	30%	Pass	
Copper	M22-Ma00336	NCP	mg/kg	5.4	5.0	8.0	30%	Pass	
Lead	M22-Ma00336	NCP	mg/kg	9.7	9.1	7.0	30%	Pass	
Mercury	M22-Ma00336	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma00336	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma00336	NCP	mg/kg	7.2	7.5	5.0	30%	Pass	
Selenium	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma00336	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma00336	NCP	mg/kg	12	10	10	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07790	NCP	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)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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:

Catherine Wilson	Analytical Services Manager
Vivian Wang	Senior Analyst-Volatile (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☑ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company: AGON Environmental - Tunnel Spoil Testing

Project №: JC0927

Project Manager: Craig Trimbur

Sampler(s): Emma Strong / Toby Gray

Project Name: 20220303042429-Eurofin-6

EDD Format (ESdat, EQuIS etc)**:** Esdat

Handed over by:

Address: Unit H76, 63-85 Turner St, Port Melbourne VIC 3207

Email for Invoice:
finance@agonenviro.com.au
LabReports.TST@agonenviro.com.au

Contact Name:
Craig Trimbur
David Lawson

Email for Results:
LabReports.TST@agonenviro.com.au
agonenvironmental@esdat.com.au
motherhublabresults1@wgtp.com.au

Phone №:
+61 400 826 907 (Craig)
+61 490 411 004 (David)

Special Directions:
Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.

Please provide eSRN along with oter sample recipt documentation.

Purchase Order:

Quote ID №: Agon WGTP TST

Analyses — Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing

Containers — Change container type & size if necessary

Required Turnaround Time (TAT) — Default will be 5 days if not ticked

♦Surcharge will apply
☐ Overnight (reporting by 9am)♦
☐ Same day ♦ ☐ 1 day ♦
☐ 2 days ♦ ☐ 3
☑ 5 days (Standard)
☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1 - TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220302_12_07_SS_Primary_EUF	2/03/22	S	X	X	X	X	X									
2	SX_OB_20220302_16_07_SS_Primary_EUF	2/03/2022 16:07:00 PM	S	X	X	X	X	X									
3	SX_OB_20220302_16_07_SS_Duplicate_EUF	2/03/2022 16:07:00 PM	S	X	X	X	X	X									
4	SX_OB_20220302_19_58_SS_Primary_EUF	2/3/22	S	X	X	X	X	X									
5	SX_OB_20220303_03_55_SS_Primary_EUF	3/3/22	S	X	X	X	X	X									
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
	Total Counts			5	5	5	5	5									

Type/Time
Chilled: Yes / [✓ No]
Temp: 27
-0.2
Correction:
Final Temp: 26.8°C

Method of Shipment: ☑ Courier (#) ☐ Hand Delivered ☐ Postal Name Signature Date Time

Laboratory Use Only								
Received By	L. Burgess	SYD | BNE | [✓ MEL] | PER | ADL | NTL | DRW	Signature		Date	3/3/22	Time	3:52 PM	Temperature	26.8°C
Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №	868276

Eurofins Environment Testing Australia Pty Ltd

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | Environment Testing Standard Terms and Conditions unless agreed otherwise. A copy is available on request.

Jake

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **David Lawson**

Report **868276-L**
Project name 20220303042429-Eurofin-6
Project ID JC0927
Received Date Mar 03, 2022

Client Sample ID			**SX_OB_20220302_12_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	**SX_OB_20220302_19_58_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma07398**	**M22-Ma07399**	**M22-Ma07400**	**M22-Ma07401**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.3	5.0	5.1	5.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	92	90	97	97
13C5-PFPeA (surr.)	1	%	85	83	90	87
13C5-PFHxA (surr.)	1	%	84	82	87	87
13C4-PFHpA (surr.)	1	%	78	86	91	89
13C8-PFOA (surr.)	1	%	80	79	87	62
13C5-PFNA (surr.)	1	%	67	76	85	90
13C6-PFDA (surr.)	1	%	48	54	69	64
13C2-PFUnDA (surr.)	1	%	38	36	51	51
13C2-PFDoDA (surr.)	1	%	40	32	49	43
13C2-PFTeDA (surr.)	1	%	16	15	27	22
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

Client Sample ID			SX_OB_20220302_12_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF	SX_OB_20220302_19_58_SS_Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22-Ma07398	M22-Ma07399	M22-Ma07400	M22-Ma07401
Date Sampled			Mar 02, 2022	Mar 02, 2022	Mar 02, 2022	Mar 02, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
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	%	36	43	56	61
D3-N-MeFOSA (surr.)	1	%	28	19	20	19
D5-N-EtFOSA (surr.)	1	%	14	25	28	26
D7-N-MeFOSE (surr.)	1	%	23	28	39	42
D9-N-EtFOSE (surr.)	1	%	24	28	40	38
D5-N-EtFOSAA (surr.)	1	%	17	12	26	19
D3-N-MeFOSAA (surr.)	1	%	13	19	35	28
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	81	77	78	67
18O2-PFHxS (surr.)	1	%	84	86	91	95
13C8-PFOS (surr.)	1	%	67	69	83	78
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	%	63	68	74	71
13C2-6:2 FTSA (surr.)	1	%	75	96	99	111
13C2-8:2 FTSA (surr.)	1	%	75	83	101	99
13C2-10:2 FTSA (surr.)	1	%	42	40	61	46
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**	**SX_OB_20220302_12_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Duplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07402**	**M22-Ma07403**	**M22-Ma07404**	**M22-Ma07405**
Date Sampled			**Mar 03, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	6.1	6.1	6.1
pH (off)	0.1	pH Units	5.0	9.3	9.1	9.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	78	91	83	55
13C5-PFPeA (surr.)	1	%	70	93	85	50
13C5-PFHxA (surr.)	1	%	69	85	75	48
13C4-PFHpA (surr.)	1	%	71	80	75	47
13C8-PFOA (surr.)	1	%	64	85	81	49
13C5-PFNA (surr.)	1	%	63	71	75	43
13C6-PFDA (surr.)	1	%	42	62	69	40
13C2-PFUnDA (surr.)	1	%	28	51	53	30
13C2-PFDoDA (surr.)	1	%	27	36	35	22
13C2-PFTeDA (surr.)	1	%	24	18	17	20
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	%	40	53	61	35
D3-N-MeFOSA (surr.)	1	%	19	25	17	22
D5-N-EtFOSA (surr.)	1	%	25	27	18	25
D7-N-MeFOSE (surr.)	1	%	26	23	24	19
D9-N-EtFOSE (surr.)	1	%	24	24	24	19
D5-N-EtFOSAA (surr.)	1	%	15	16	17	11
D3-N-MeFOSAA (surr.)	1	%	19	18	24	13

Client Sample ID			SX_OB_20220303_03_55_SS_Primary_EUF	SX_OB_20220302_12_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07402**	**M22-Ma07403**	**M22-Ma07404**	**M22-Ma07405**
Date Sampled			**Mar 03, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	63	82	77	52
18O2-PFHxS (surr.)	1	%	71	79	83	49
13C8-PFOS (surr.)	1	%	57	70	76	44
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	%	58	63	61	37
13C2-6:2 FTSA (surr.)	1	%	74	78	77	37
13C2-8:2 FTSA (surr.)	1	%	59	98	97	52
13C2-10:2 FTSA (surr.)	1	%	29	40	42	25
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220302_19_58_SS_Primary_EUF	SX_OB_20220303_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07406**	**M22-Ma07407**
Date Sampled			**Mar 02, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid[C01]		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.1	6.1
pH (off)	0.1	pH Units	9.1	9.2

Client Sample ID			SX_OB_20220302_19_58_SS_Primary_EUF	SX_OB_20220303_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07406**	**M22-Ma07407**
Date Sampled			**Mar 02, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	69	89
13C5-PFPeA (surr.)	1	%	69	86
13C5-PFHxA (surr.)	1	%	63	83
13C4-PFHpA (surr.)	1	%	65	84
13C8-PFOA (surr.)	1	%	52	77
13C5-PFNA (surr.)	1	%	64	78
13C6-PFDA (surr.)	1	%	58	72
13C2-PFUnDA (surr.)	1	%	46	65
13C2-PFDoDA (surr.)	1	%	32	53
13C2-PFTeDA (surr.)	1	%	28	35
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	53	78
D3-N-MeFOSA (surr.)	1	%	17	29
D5-N-EtFOSA (surr.)	1	%	19	36
D7-N-MeFOSE (surr.)	1	%	23	41
D9-N-EtFOSE (surr.)	1	%	23	41
D5-N-EtFOSAA (surr.)	1	%	17	19
D3-N-MeFOSAA (surr.)	1	%	18	19
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	0.01	ug/L	< 0.01	< 0.01

Client Sample ID			SX_OB_20220302_19_58_SS_Primary_EUF	SX_OB_20220303_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma07406**	**M22-Ma07407**
Date Sampled			Mar 02, 2022	Mar 03, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorooctanesulfonic acid (PFOS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	58	76
18O2-PFHxS (surr.)	1	%	67	82
13C8-PFOS (surr.)	1	%	67	84
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	54	66
13C2-6:2 FTSA (surr.)	1	%	64	86
13C2-8:2 FTSA (surr.)	1	%	85	106
13C2-10:2 FTSA (surr.)	1	%	36	64
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 04, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 03, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220303042429-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 868276
Phone: 08 8338 1009
Fax:

Received: Mar 3, 2022 3:52 PM
Due: Mar 10, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	Soil	M22-Ma07393		X	X	X
2	SX_OB_20220302_16_07_SS_Primary_EUF	Mar 02, 2022	4:07PM	Soil	M22-Ma07394		X	X	X
3	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	Soil	M22-Ma07395		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220302_19_58_SS_Primary_EUF	Mar 02, 2022	7:58PM	Soil	M22-Ma07396		X	X	X
5	SX_OB_20220303_03_55_SS_Primary_EUF	Mar 03, 2022	3:55AM	Soil	M22-Ma07397		X	X	X
6	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	AUS Leachate - pH 5.0	M22-Ma07398	X		X	
7	SX_OB_20220302_16_07_S	Mar 02, 2022	4:07PM	AUS Leachate - pH 5.0	M22-Ma07399	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	AUS Leachate - pH 5.0	M22-Ma07400	X		X	
9	SX_OB_20220302_19_58_SS_Primary_EUF	Mar 02, 2022	7:58PM	AUS Leachate - pH 5.0	M22-Ma07401	X		X	
10	SX_OB_20220303_03_55_SS_Primary_EUF	Mar 03, 2022	3:55AM	AUS Leachate - pH 5.0	M22-Ma07402	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	AUS Leachate - Reagent Water	M22-Ma07403	X		X	
12	SX_OB_20220302_16_07_SS_Primary_EUF	Mar 02, 2022	4:07PM	AUS Leachate - Reagent Water	M22-Ma07404	X		X	
13	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	AUS Leachate - Reagent Water	M22-Ma07405	X		X	
14	SX_OB_20220302_19_58_S	Mar 02, 2022	7:58PM	AUS Leachate - Reagent	M22-Ma07406	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
15	SX_OB_20220303_03_55_SS_Primary_EUF	Mar 03, 2022	3:55AM	AUS Leachate - Reagent Water	M22-Ma07407	X		X	
Test Counts						10	5	15	5

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	85			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	117			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	100			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	99			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	107			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	113			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	108			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	110			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	88			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	113			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	105			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	95			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	101			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	84			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	91			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	81			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	95			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	70			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	93			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	91			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	96			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	112			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	83			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	96			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	106			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	95			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)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07403	CP	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)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07403	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07403	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

Certificate of Analysis

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

Attention: **David Lawson**

Report **868276-S**
Project name 20220303042429-Eurofin-6
Project ID JC0927
Received Date Mar 03, 2022

Client Sample ID			SX_OB_20220302_12_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF	SX_OB_20220302_19_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma07393**	**M22-Ma07394**	**M22-Ma07395**	**M22-Ma07396**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220302_12_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF	SX_OB_20220302_19_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma07393**	**M22-Ma07394**	**M22-Ma07395**	**M22-Ma07396**
Date Sampled			Mar 02, 2022	Mar 02, 2022	Mar 02, 2022	Mar 02, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	56	101	57	59
Toluene-d8 (surr.)	1	%	55	57	57	58
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			**SX_OB_20220302_12_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	**SX_OB_20220302_19_58_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma07393**	**M22-Ma07394**	**M22-Ma07395**	**M22-Ma07396**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	77	98	95	98
p-Terphenyl-d14 (surr.)	1	%	84	94	100	92
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	126	85	95	101
Tetrachloro-m-xylene (surr.)	1	%	131	123	96	120

Client Sample ID			SX_OB_20220302_12_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Primary_EUF	SX_OB_20220302_16_07_SS_Duplicate_EUF	SX_OB_20220302_19_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma07393**	**M22-Ma07394**	**M22-Ma07395**	**M22-Ma07396**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	126	85	95	101
Tetrachloro-m-xylene (surr.)	1	%	131	123	96	120
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	57	72	73	73
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	240	140	160	160
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.5	9.0	9.0	8.9
% Moisture	1	%	32	30	28	30
Heavy Metals						
Arsenic	2	mg/kg	29	27	19	20
Cadmium	0.4	mg/kg	0.6	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	130	110	110	120
Copper	5	mg/kg	86	79	70	63
Lead	5	mg/kg	5.4	< 5	< 5	5.7
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID **Sample Matrix** **Eurofins Sample No.** **Date Sampled** Test/Reference	LOR	Unit	**SX_OB_20220302_12_07_SS_Primary_EUF** **Soil** **M22-Ma07393** **Mar 02, 2022**	**SX_OB_20220302_16_07_SS_Primary_EUF** **Soil** **M22-Ma07394** **Mar 02, 2022**	**SX_OB_20220302_16_07_SS_Duplicate_EUF** **Soil** **M22-Ma07395** **Mar 02, 2022**	**SX_OB_20220302_19_58_SS_Primary_EUF** **Soil** **M22-Ma07396** **Mar 02, 2022**
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	240	220	200	170
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	170	200	130	120
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	%	111	112	118	123
13C5-PFPeA (surr.)	1	%	89	99	101	94
13C5-PFHxA (surr.)	1	%	84	88	90	88
13C4-PFHpA (surr.)	1	%	76	79	80	85
13C8-PFOA (surr.)	1	%	75	78	84	76
13C5-PFNA (surr.)	1	%	66	60	55	71
13C6-PFDA (surr.)	1	%	60	59	65	70
13C2-PFUnDA (surr.)	1	%	103	100	98	114
13C2-PFDoDA (surr.)	1	%	100	109	112	112
13C2-PFTeDA (surr.)	1	%	59	66	63	58
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
13C8-FOSA (surr.)	1	%	73	73	79	77
D3-N-MeFOSA (surr.)	1	%	96	97	102	101
D5-N-EtFOSA (surr.)	1	%	112	111	114	121
D7-N-MeFOSE (surr.)	1	%	88	89	95	94
D9-N-EtFOSE (surr.)	1	%	85	90	90	92
D5-N-EtFOSAA (surr.)	1	%	122	143	138	146
D3-N-MeFOSAA (surr.)	1	%	88	93	94	98

Client Sample ID			**SX_OB_20220302_12_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Primary_EUF**	**SX_OB_20220302_16_07_SS_Duplicate_EUF**	**SX_OB_20220302_19_58_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma07393**	**M22-Ma07394**	**M22-Ma07395**	**M22-Ma07396**
Date Sampled			**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**	**Mar 02, 2022**
Test/Reference	LOR	Unit				
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	%	76	74	77	83
18O2-PFHxS (surr.)	1	%	71	67	69	72
13C8-PFOS (surr.)	1	%	68	68	75	71
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	%	117	95	88	88
13C2-6:2 FTSA (surr.)	1	%	94	110	136	116
13C2-8:2 FTSA (surr.)	1	%	92	93	100	106
13C2-10:2 FTSA (surr.)	1	%	108	117	114	124
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

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
NaphthaleneN02	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)N04	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH >C10-C16 less Naphthalene (F2)N01	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Volatile Organics			
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	64
Toluene-d8 (surr.)	1	%	62
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95
p-Terphenyl-d14 (surr.)	1	%	95
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	94
Tetrachloro-m-xylene (surr.)	1	%	91
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	94
Tetrachloro-m-xylene (surr.)	1	%	91
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Phenols (non-Halogenated)			
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	72
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.0
% Moisture	1	%	31
Heavy Metals			
Arsenic	2	mg/kg	21
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	110
Copper	5	mg/kg	67
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Molybdenum	5	mg/kg	< 5
Nickel	5	mg/kg	180
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	120
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)^{N11}	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)^{N11}	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)^{N11}	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)^{N11}	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)^{N11}	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)^{N11}	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)^{N11}	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)^{N11}	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)^{N11}	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)^{N15}	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)^{N11}	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	113
13C5-PFPeA (surr.)	1	%	107
13C5-PFHxA (surr.)	1	%	82
13C4-PFHpA (surr.)	1	%	78
13C8-PFOA (surr.)	1	%	76
13C5-PFNA (surr.)	1	%	67
13C6-PFDA (surr.)	1	%	62
13C2-PFUnDA (surr.)	1	%	92
13C2-PFDoDA (surr.)	1	%	100
13C2-PFTeDA (surr.)	1	%	60

Client Sample ID			**SX_OB_20220303_03_55_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma07397**
Date Sampled			**Mar 03, 2022**
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	74
D3-N-MeFOSA (surr.)	1	%	99
D5-N-EtFOSA (surr.)	1	%	111
D7-N-MeFOSE (surr.)	1	%	91
D9-N-EtFOSE (surr.)	1	%	87
D5-N-EtFOSAA (surr.)	1	%	129
D3-N-MeFOSAA (surr.)	1	%	89
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	74
18O2-PFHxS (surr.)	1	%	68
13C8-PFOS (surr.)	1	%	70
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	80
13C2-6:2 FTSA (surr.)	1	%	107
13C2-8:2 FTSA (surr.)	1	%	104
13C2-10:2 FTSA (surr.)	1	%	114
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 04, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 04, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 04, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
- Method: LTM-INO-4100 Analysis of Cr6+ by Discrete Analyser			
Cyanide (total)	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 04, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 03, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 04, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 03, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220303042429-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 868276
Phone: 08 8338 1009
Fax:

Received: Mar 3, 2022 3:52 PM
Due: Mar 10, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	Soil	M22-Ma07393		X	X	X
2	SX_OB_20220302_16_07_SS_Primary_EUF	Mar 02, 2022	4:07PM	Soil	M22-Ma07394		X	X	X
3	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	Soil	M22-Ma07395		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220302_19_58_SS_Primary_EUF	Mar 02, 2022	7:58PM	Soil	M22-Ma07396		X	X	X
5	SX_OB_20220303_03_55_SS_Primary_EUF	Mar 03, 2022	3:55AM	Soil	M22-Ma07397		X	X	X
6	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	AUS Leachate - pH 5.0	M22-Ma07398	X		X	
7	SX_OB_20220302_16_07_S	Mar 02, 2022	4:07PM	AUS Leachate - pH 5.0	M22-Ma07399	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	AUS Leachate - pH 5.0	M22-Ma07400	X		X	
9	SX_OB_20220302_19_58_SS_Primary_EUF	Mar 02, 2022	7:58PM	AUS Leachate - pH 5.0	M22-Ma07401	X		X	
10	SX_OB_20220303_03_55_SS_Primary_EUF	Mar 03, 2022	3:55AM	AUS Leachate - pH 5.0	M22-Ma07402	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220302_12_07_SS_Primary_EUF	Mar 02, 2022	12:07PM	AUS Leachate - Reagent Water	M22-Ma07403	X		X	
12	SX_OB_20220302_16_07_SS_Primary_EUF	Mar 02, 2022	4:07PM	AUS Leachate - Reagent Water	M22-Ma07404	X		X	
13	SX_OB_20220302_16_07_SS_Duplicate_EUF	Mar 02, 2022	4:07PM	AUS Leachate - Reagent Water	M22-Ma07405	X		X	
14	SX_OB_20220302_19_58_S	Mar 02, 2022	7:58PM	AUS Leachate - Reagent	M22-Ma07406	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EU F			Water					
15	SX_OB_20220 303_03_55_S S_Primary_EU F	Mar 03, 2022	3:55AM	AUS Leachate - Reagent Water	M22-Ma07407	X		X	
Test Counts						10	5	15	5

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	110			70-130	Pass	
TRH C10-C14	%	110			70-130	Pass	
Naphthalene	%	90			70-130	Pass	
TRH C6-C10	%	101			70-130	Pass	
TRH >C10-C16	%	113			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	95			70-130	Pass	
1.1.1-Trichloroethane	%	99			70-130	Pass	
1.2-Dichlorobenzene	%	110			70-130	Pass	
1.2-Dichloroethane	%	112			70-130	Pass	
Benzene	%	104			70-130	Pass	
Ethylbenzene	%	113			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	116			70-130	Pass	
Toluene	%	113			70-130	Pass	
Trichloroethene	%	114			70-130	Pass	
Xylenes - Total*	%	118			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	83			70-130	Pass	
Acenaphthylene	%	73			70-130	Pass	
Anthracene	%	89			70-130	Pass	
Benz(a)anthracene	%	89			70-130	Pass	
Benzo(a)pyrene	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	%	83			70-130	Pass	
Benzo(k)fluoranthene	%	125			70-130	Pass	
Chrysene	%	73			70-130	Pass	
Dibenz(a.h)anthracene	%	73			70-130	Pass	
Fluoranthene	%	73			70-130	Pass	
Fluorene	%	125			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	89			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
Phenanthrene	%	95			70-130	Pass	
Pyrene	%	114			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	111			70-130	Pass	
4.4'-DDD	%	108			70-130	Pass	
4.4'-DDE	%	98			70-130	Pass	
4.4'-DDT	%	77			70-130	Pass	
a-HCH	%	103			70-130	Pass	
Aldrin	%	95			70-130	Pass	
b-HCH	%	102			70-130	Pass	
d-HCH	%	109			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	114			70-130	Pass	
Endosulfan II	%	95			70-130	Pass	
Endosulfan sulphate	%	93			70-130	Pass	
Endrin	%	101			70-130	Pass	
Endrin aldehyde	%	91			70-130	Pass	
Endrin ketone	%	102			70-130	Pass	
g-HCH (Lindane)	%	90			70-130	Pass	
Heptachlor	%	109			70-130	Pass	
Heptachlor epoxide	%	111			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	123			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	108			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	102			25-140	Pass	
2.4-Dichlorophenol	%	57			25-140	Pass	
2.4.5-Trichlorophenol	%	57			25-140	Pass	
2.4.6-Trichlorophenol	%	49			25-140	Pass	
2.6-Dichlorophenol	%	48			25-140	Pass	
4-Chloro-3-methylphenol	%	68			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pentachlorophenol	%	75			25-140	Pass	
Tetrachlorophenols - Total	%	50			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	42			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	33			25-140	Pass	
2-Nitrophenol	%	58			25-140	Pass	
2.4-Dimethylphenol	%	63			25-140	Pass	
2.4-Dinitrophenol	%	40			25-140	Pass	
2-Methylphenol (o-Cresol)	%	43			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	65			25-140	Pass	
4-Nitrophenol	%	49			25-140	Pass	
Dinoseb	%	45			25-140	Pass	
Phenol	%	102			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	115			70-130	Pass	
Cyanide (total)	%	108			70-130	Pass	
Fluoride (Total)	%	100			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	112			80-120	Pass	
Cadmium	%	109			80-120	Pass	
Chromium	%	116			80-120	Pass	
Copper	%	115			80-120	Pass	
Lead	%	120			80-120	Pass	
Mercury	%	103			80-120	Pass	
Molybdenum	%	111			80-120	Pass	
Nickel	%	110			80-120	Pass	
Selenium	%	113			80-120	Pass	
Silver	%	110			80-120	Pass	
Tin	%	109			80-120	Pass	
Zinc	%	117			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	109			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	102			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	101			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	103			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	113			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	103			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	115			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	112			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	113			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	117			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	116			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	116			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	107			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	100			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	88			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	98			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	91			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	95			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	95			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	118			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	99			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	95			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	89			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	66			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	90			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	98			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	95			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	106			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma11153	NCP	%	84			70-130	Pass	
TRH C10-C14	M22-Ma08764	NCP	%	109			70-130	Pass	
Naphthalene	M22-Ma11153	NCP	%	75			70-130	Pass	
TRH C6-C10	M22-Ma11153	NCP	%	82			70-130	Pass	
TRH >C10-C16	M22-Ma08764	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma11153	NCP	%	85			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma11153	NCP	%	94			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma11153	NCP	%	88			70-130	Pass	
1.2-Dichloroethane	M22-Ma11153	NCP	%	94			70-130	Pass	
Benzene	M22-Ma11153	NCP	%	83			70-130	Pass	
Ethylbenzene	M22-Ma11153	NCP	%	81			70-130	Pass	
m&p-Xylenes	M22-Ma11153	NCP	%	84			70-130	Pass	
o-Xylene	M22-Ma11153	NCP	%	91			70-130	Pass	
Toluene	M22-Ma11153	NCP	%	86			70-130	Pass	
Trichloroethene	M22-Ma11153	NCP	%	82			70-130	Pass	
Xylenes - Total*	M22-Ma11153	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma05705	NCP	%	100			70-130	Pass	
Acenaphthylene	M22-Ma05705	NCP	%	107			70-130	Pass	
Anthracene	M22-Ma05705	NCP	%	97			70-130	Pass	
Benz(a)anthracene	M22-Ma05705	NCP	%	99			70-130	Pass	
Benzo(a)pyrene	M22-Ma05705	NCP	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma05705	NCP	%	82			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma05705	NCP	%	86			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma05705	NCP	%	102			70-130	Pass	
Chrysene	M22-Ma05705	NCP	%	86			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma05705	NCP	%	88			70-130	Pass	
Fluoranthene	M22-Ma05705	NCP	%	94			70-130	Pass	
Fluorene	M22-Ma05705	NCP	%	100			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma05705	NCP	%	93			70-130	Pass	
Naphthalene	M22-Ma05705	NCP	%	96			70-130	Pass	
Phenanthrene	M22-Ma05705	NCP	%	78			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pyrene	M22-Ma05705	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Fe58101	NCP	%	92			70-130	Pass	
4.4'-DDD	M22-Fe58101	NCP	%	94			70-130	Pass	
4.4'-DDE	M22-Fe58101	NCP	%	85			70-130	Pass	
4.4'-DDT	M22-Fe58101	NCP	%	86			70-130	Pass	
a-HCH	M22-Fe58101	NCP	%	78			70-130	Pass	
Aldrin	M22-Fe58101	NCP	%	85			70-130	Pass	
b-HCH	M22-Fe58101	NCP	%	124			70-130	Pass	
d-HCH	M22-Fe58101	NCP	%	78			70-130	Pass	
Dieldrin	M22-Fe58101	NCP	%	90			70-130	Pass	
Endosulfan I	M22-Fe58101	NCP	%	102			70-130	Pass	
Endosulfan II	M22-Fe58101	NCP	%	82			70-130	Pass	
Endosulfan sulphate	M22-Fe58101	NCP	%	91			70-130	Pass	
Endrin	M22-Fe58101	NCP	%	84			70-130	Pass	
Endrin aldehyde	M22-Fe58101	NCP	%	78			70-130	Pass	
Endrin ketone	M22-Fe58101	NCP	%	98			70-130	Pass	
g-HCH (Lindane)	M22-Fe58101	NCP	%	127			70-130	Pass	
Heptachlor	M22-Fe58101	NCP	%	74			70-130	Pass	
Heptachlor epoxide	M22-Fe58101	NCP	%	82			70-130	Pass	
Hexachlorobenzene	M22-Fe58101	NCP	%	73			70-130	Pass	
Methoxychlor	M22-Fe58101	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Ma05057	NCP	%	71			70-130	Pass	
Aroclor-1260	M22-Ma05057	NCP	%	79			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma05705	NCP	%	97			30-130	Pass	
2.4-Dichlorophenol	M22-Ma05705	NCP	%	90			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma05705	NCP	%	94			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma05705	NCP	%	79			30-130	Pass	
2.6-Dichlorophenol	M22-Ma05705	NCP	%	71			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma05705	NCP	%	107			30-130	Pass	
Pentachlorophenol	M22-Ma05705	NCP	%	73			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma05705	NCP	%	73			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma05705	NCP	%	77			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma05705	NCP	%	106			30-130	Pass	
2-Nitrophenol	M22-Ma05705	NCP	%	97			30-130	Pass	
2.4-Dimethylphenol	M22-Ma05705	NCP	%	111			30-130	Pass	
2.4-Dinitrophenol	M22-Ma05705	NCP	%	92			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma05705	NCP	%	91			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma05705	NCP	%	112			30-130	Pass	
4-Nitrophenol	M22-Ma05705	NCP	%	108			30-130	Pass	
Dinoseb	M22-Ma05705	NCP	%	76			30-130	Pass	
Phenol	M22-Ma05705	NCP	%	104			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Fe58261	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic	M22-Ma00327	NCP	%	100			75-125	Pass	
Cadmium	M22-Ma00327	NCP	%	109			75-125	Pass	
Chromium	M22-Ma00327	NCP	%	108			75-125	Pass	
Copper	M22-Ma00327	NCP	%	111			75-125	Pass	
Lead	M22-Ma02481	NCP	%	99			75-125	Pass	
Mercury	M22-Ma00327	NCP	%	93			75-125	Pass	
Molybdenum	M22-Ma00327	NCP	%	106			75-125	Pass	
Nickel	M22-Ma00327	NCP	%	112			75-125	Pass	
Selenium	M22-Ma00327	NCP	%	95			75-125	Pass	
Silver	M22-Ma00327	NCP	%	107			75-125	Pass	
Tin	M22-Ma00327	NCP	%	95			75-125	Pass	
Zinc	M22-Ma02481	NCP	%	75			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07791	NCP	%	102			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07791	NCP	%	110			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07791	NCP	%	108			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07791	NCP	%	123			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07791	NCP	%	117			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07791	NCP	%	113			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07791	NCP	%	119			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07791	NCP	%	117			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma07791	NCP	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07791	NCP	%	105			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07791	NCP	%	97			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07791	NCP	%	95			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07791	NCP	%	98			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07791	NCP	%	90			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07791	NCP	%	88			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07791	NCP	%	93			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07791	NCP	%	108			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07791	NCP	%	99			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07791	NCP	%	111			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07791	NCP	%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07791	NCP	%	78			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07791	NCP	%	101			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07791	NCP	%	112			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma07791	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07791	NCP	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07791	NCP	%	122			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07791	NCP	%	106			50-150	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Ma07394	CP	%	112			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma07395	CP	%	93			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma11152	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma00710	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma00710	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma00710	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma11152	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma00710	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma00710	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma00710	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.4-Dichlorobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma11152	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma11152	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma11152	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma11152	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma11152	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma11152	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma11152	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Phenanthrene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma02314	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma02314	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma02314	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma04517	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma04517	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma04517	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma04517	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma04517	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma04517	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma04517	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma04517	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma04517	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma04517	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma04517	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
4-Nitrophenol	M22-Ma04517	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma04517	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma04517	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Ma00352	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma07393	CP	mg/kg	240	280	15	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma11106	NCP	pH Units	8.9	8.9	pass	30%	Pass	
% Moisture	M22-Ma07393	CP	%	32	32	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	M22-Ma00336	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma00336	NCP	mg/kg	23	22	3.0	30%	Pass	
Copper	M22-Ma00336	NCP	mg/kg	5.4	5.0	8.0	30%	Pass	
Lead	M22-Ma00336	NCP	mg/kg	9.7	9.1	7.0	30%	Pass	
Mercury	M22-Ma00336	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma00336	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma00336	NCP	mg/kg	7.2	7.5	5.0	30%	Pass	
Selenium	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma00336	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma00336	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma00336	NCP	mg/kg	12	10	10	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma07790	NCP	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)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma07790	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma07397	CP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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:

Michael Cassidy	Analytical Services Manager
Vivian Wang	Senior Analyst-Volatile (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☑ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company: AGON Environmental - Tunnel Spoil Testing
Address: Unit H76, 63-85 Turner St, Port Melbourne VIC 3207
Contact Name: Craig Trimbur
David Lawson
Phone №: +61 400 826 907 (Craig)
+61 490 411 004 (David)
Special Directions: Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.

Please provide eSRN along with oter sample recipt documentation.

Purchase Order:
Quote ID №: Agon WGTP TST

Project №: JC0927
Project Name: 20220304084531-Eurofin-14
Project Manager: Craig Trimbur
EDD Format (ESdat, EQuIS etc): Esdat

Sampler(s): Brandon Clarke - Agon Environmental
Handed over by: Brandon Clarke - Agon Environmental
Email for Invoice: finance@agonenviro.com.au
LabReports.TST@agonenviro.com.au
Email for Results: LabReports.TST@agonenviro.com.au
agonenvironmental@esdat.com.au
motherhublabresults1@wgtp.com.au

Analyses
Where metals are requested, please specify "Total" or "Filtered"
SUITE code must be used to attract SUITE pricing

Containers
Change container type & size if necessary.

Required Turnaround Time (TAT)
Default will be 5 days if not ticked

♦Surcharge will apply
☐ Overnight (reporting by 9am)♦
☐ Same day♦ ☐ 1 day♦
☐ 2 days♦ ☐ 3 days♦
☑ 5 days (Standard)
Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220303_12_24_SS_Primary_EUF	03.03.22 12:24	S	☒	☒	☒	☒	☒								1	
2	SX_OB_20220303_12_25_SS_Primary_EUF	03.03.22 12:25	S	☒	☒	☒	☒	☒									
3	SX_OB_20220303_16_19_SS_Primary_EUF	03.03.22 16:19	S	☒	☒	☒	☒	☒									
4	SX_OB_20220303_16_19_SS_Duplicate_EUF	03.03.22 16:19	S	☒	☒	☒	☒	☒									
5	SX_OB_20220303_20_10_SS_Primary_EUF	03.03.22 20:10	S	☒	☒	☒	☒	☒									
6	SX_OB_20220304_00_01_SS_Primary_EUF	04.03.22 00:01	S	☒	☒	☒	☒	☒									
7	SX_OB_20220304_04_02_SS_Primary_EUF	04.03.22 04:02	S	☒	☒	☒	☒	☒									
8	SX_OB_20220304_08_22_SS_Triplicate_EUF	04.03.22 08:22	S	☒	☒	☒	☒	☒									
9	SX_OB_20220304_08_24_SS_Primary_EUF	04.03.22 08:24	S	☒	☒	☒	☒	☒									
10																	
11																	
12																	868643
13																	Jake

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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:	**David Lawson**
Report	**868643-L**
Project name	20220304084531-Eurofin-14
Project ID	JC0927
Received Date	Mar 04, 2022

Client Sample ID			**SX_OB_20220303_12_24_SS_Primary_EUF**	**SX_OB_20220303_12_25_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Duplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma09950**	**M22-Ma09951**	**M22-Ma09952**	**M22-Ma09953**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.1	5.1	5.1	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	118	122	124	122
13C5-PFPeA (surr.)	1	%	78	80	80	81
13C5-PFHxA (surr.)	1	%	89	87	93	88
13C4-PFHpA (surr.)	1	%	86	88	97	88
13C8-PFOA (surr.)	1	%	64	64	72	52
13C5-PFNA (surr.)	1	%	111	110	125	113
13C6-PFDA (surr.)	1	%	129	124	142	123
13C2-PFUnDA (surr.)	1	%	146	128	162	137
13C2-PFDoDA (surr.)	1	%	159	138	174	140
13C2-PFTeDA (surr.)	1	%	105	111	112	151
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

Client Sample ID			**SX_OB_20220303_12_24_SS_Primary_EUF**	**SX_OB_20220303_12_25_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Duplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma09950**	**M22-Ma09951**	**M22-Ma09952**	**M22-Ma09953**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
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	%	82	73	89	80
D3-N-MeFOSA (surr.)	1	%	94	113	122	161
D5-N-EtFOSA (surr.)	1	%	81	92	98	131
D7-N-MeFOSE (surr.)	1	%	129	114	147	130
D9-N-EtFOSE (surr.)	1	%	124	110	142	119
D5-N-EtFOSAA (surr.)	1	%	142	136	149	141
D3-N-MeFOSAA (surr.)	1	%	119	113	149	130
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	78	76	82	71
18O2-PFHxS (surr.)	1	%	90	89	91	95
13C8-PFOS (surr.)	1	%	89	91	100	96
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	%	83	86	89	87
13C2-6:2 FTSA (surr.)	1	%	93	98	104	110
13C2-8:2 FTSA (surr.)	1	%	132	126	141	132
13C2-10:2 FTSA (surr.)	1	%	145	125	160	133
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220303_20_10_SS_Primary_EUF**	**SX_OB_20220304_00_01_SS_Primary_EUF**	**SX_OB_20220304_04_02_SS_Primary_EUF**	**SX_OB_20220304_08_22_SS_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma09954**	**M22-Ma09955**	**M22-Ma09956**	**M22-Ma09957**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.1	5.1	5.1	5.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	125	125	124
13C5-PFPeA (surr.)	1	%	93	98	96	95
13C5-PFHxA (surr.)	1	%	88	94	96	92
13C4-PFHpA (surr.)	1	%	95	95	101	94
13C8-PFOA (surr.)	1	%	59	65	75	78
13C5-PFNA (surr.)	1	%	100	104	108	102
13C6-PFDA (surr.)	1	%	89	99	104	92
13C2-PFUnDA (surr.)	1	%	77	83	86	76
13C2-PFDoDA (surr.)	1	%	72	76	78	72
13C2-PFTeDA (surr.)	1	%	99	95	94	99
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	%	107	112	114	105
D3-N-MeFOSA (surr.)	1	%	62	68	46	94
D5-N-EtFOSA (surr.)	1	%	76	78	57	114
D7-N-MeFOSE (surr.)	1	%	83	81	80	85
D9-N-EtFOSE (surr.)	1	%	80	77	77	84
D5-N-EtFOSAA (surr.)	1	%	34	43	39	33
D3-N-MeFOSAA (surr.)	1	%	38	44	36	32

Client Sample ID			**SX_OB_20220303_20_10_SS_Primary_EUF**	**SX_OB_20220304_00_01_SS_Primary_EUF**	**SX_OB_20220304_04_02_SS_Primary_EUF**	**SX_OB_20220304_08_22_SS_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma09954**	**M22-Ma09955**	**M22-Ma09956**	**M22-Ma09957**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	75	81	81	80
18O2-PFHxS (surr.)	1	%	99	95	97	96
13C8-PFOS (surr.)	1	%	105	115	114	110
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	%	86	93	89	85
13C2-6:2 FTSA (surr.)	1	%	124	140	118	105
13C2-8:2 FTSA (surr.)	1	%	95	96	86	81
13C2-10:2 FTSA (surr.)	1	%	81	86	70	68
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220304_08_24_SS_Primary_EUF**	**SX_OB_20220303_12_24_SS_Primary_EUF**	**SX_OB_20220303_12_25_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09958**	**M22-Ma09959**	**M22-Ma09960**	**M22-Ma09961**
Date Sampled			**Mar 04, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	6.0	6.0	6.0
pH (off)	0.1	pH Units	5.1	8.9	9.0	9.1

Client Sample ID			SX_OB_20220304_08_24_SS_Primary_EUF	SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09958**	**M22-Ma09959**	**M22-Ma09960**	**M22-Ma09961**
Date Sampled			Mar 04, 2022	Mar 03, 2022	Mar 03, 2022	Mar 03, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	123	133	105	106
13C5-PFPeA (surr.)	1	%	96	95	78	78
13C5-PFHxA (surr.)	1	%	90	98	83	88
13C4-PFHpA (surr.)	1	%	92	104	88	89
13C8-PFOA (surr.)	1	%	77	72	68	66
13C5-PFNA (surr.)	1	%	106	110	100	105
13C6-PFDA (surr.)	1	%	96	103	92	103
13C2-PFUnDA (surr.)	1	%	80	89	74	87
13C2-PFDoDA (surr.)	1	%	74	78	62	84
13C2-PFTeDA (surr.)	1	%	101	103	84	117
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	%	115	122	104	114
D3-N-MeFOSA (surr.)	1	%	101	94	65	76
D5-N-EtFOSA (surr.)	1	%	121	103	74	86
D7-N-MeFOSE (surr.)	1	%	97	82	68	85
D9-N-EtFOSE (surr.)	1	%	99	81	69	84
D5-N-EtFOSAA (surr.)	1	%	35	38	33	40
D3-N-MeFOSAA (surr.)	1	%	35	35	30	40
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220304_08_24_SS_Primary_EUF	SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09958**	**M22-Ma09959**	**M22-Ma09960**	**M22-Ma09961**
Date Sampled			Mar 04, 2022	Mar 03, 2022	Mar 03, 2022	Mar 03, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	81	93	75	79
18O2-PFHxS (surr.)	1	%	93	103	95	98
13C8-PFOS (surr.)	1	%	114	119	112	120
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	%	85	99	79	81
13C2-6:2 FTSA (surr.)	1	%	107	138	113	118
13C2-8:2 FTSA (surr.)	1	%	85	97	81	89
13C2-10:2 FTSA (surr.)	1	%	72	69	58	75
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220303_16_19_SS_Duplicate_EUF	SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09962**	**M22-Ma09963**	**M22-Ma09964**	**M22-Ma09965**
Date Sampled			Mar 03, 2022	Mar 03, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0	6.0	6.0
pH (off)	0.1	pH Units	9.1	9.1	8.9	9.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220303_16_19_SS_Duplicate_EUF	SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09962**	**M22-Ma09963**	**M22-Ma09964**	**M22-Ma09965**
Date Sampled			Mar 03, 2022	Mar 03, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
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	%	107	93	85	99
13C5-PFPeA (surr.)	1	%	86	85	79	91
13C5-PFHxA (surr.)	1	%	83	82	78	88
13C4-PFHpA (surr.)	1	%	87	84	81	83
13C8-PFOA (surr.)	1	%	53	53	55	62
13C5-PFNA (surr.)	1	%	94	74	75	67
13C6-PFDA (surr.)	1	%	85	73	71	58
13C2-PFUnDA (surr.)	1	%	71	55	63	55
13C2-PFDoDA (surr.)	1	%	65	48	56	50
13C2-PFTeDA (surr.)	1	%	81	23	24	26
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	%	99	79	81	70
D3-N-MeFOSA (surr.)	1	%	77	93	71	71
D5-N-EtFOSA (surr.)	1	%	86	106	89	83
D7-N-MeFOSE (surr.)	1	%	78	60	60	56
D9-N-EtFOSE (surr.)	1	%	78	61	59	56
D5-N-EtFOSAA (surr.)	1	%	37	30	35	23
D3-N-MeFOSAA (surr.)	1	%	33	32	34	25
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	74	73	77	82
18O2-PFHxS (surr.)	1	%	100	81	91	82
13C8-PFOS (surr.)	1	%	106	71	77	68

Client Sample ID			**SX_OB_20220303_16_19_SS_Duplicate_EUF**	**SX_OB_20220303_20_10_SS_Primary_EUF**	**SX_OB_20220304_00_01_SS_Primary_EUF**	**SX_OB_20220304_04_02_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09962**	**M22-Ma09963**	**M22-Ma09964**	**M22-Ma09965**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
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	%	82	69	66	71
13C2-6:2 FTSA (surr.)	1	%	131	99	101	81
13C2-8:2 FTSA (surr.)	1	%	77	113	108	105
13C2-10:2 FTSA (surr.)	1	%	61	57	66	59
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220304_08_22_SS_Triplicate_EUF**	**SX_OB_20220304_08_24_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09966**	**M22-Ma09967**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid[C01]		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0
pH (off)	0.1	pH Units	9.1	9.1
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	99	94
13C5-PFPeA (surr.)	1	%	91	90

Client Sample ID			**SX_OB_20220304_08_22_SS_Triplicate_EUF**	**SX_OB_20220304_08_24_SS_Primary_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09966**	**M22-Ma09967**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
13C5-PFHxA (surr.)	1	%	91	83
13C4-PFHpA (surr.)	1	%	94	82
13C8-PFOA (surr.)	1	%	86	70
13C5-PFNA (surr.)	1	%	80	73
13C6-PFDA (surr.)	1	%	71	64
13C2-PFUnDA (surr.)	1	%	61	60
13C2-PFDoDA (surr.)	1	%	49	51
13C2-PFTeDA (surr.)	1	%	27	26
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	84	77
D3-N-MeFOSA (surr.)	1	%	94	85
D5-N-EtFOSA (surr.)	1	%	105	96
D7-N-MeFOSE (surr.)	1	%	70	65
D9-N-EtFOSE (surr.)	1	%	70	62
D5-N-EtFOSAA (surr.)	1	%	30	29
D3-N-MeFOSAA (surr.)	1	%	27	29
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	88	84
18O2-PFHxS (surr.)	1	%	93	79
13C8-PFOS (surr.)	1	%	81	73
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01

Client Sample ID			SX_OB_20220304_08_22_SS_Triplicate_EUF	SX_OB_20220304_08_24_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma09966**	**M22-Ma09967**
Date Sampled			Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
13C2-4:2 FTSA (surr.)	1	%	72	69
13C2-6:2 FTSA (surr.)	1	%	98	87
13C2-8:2 FTSA (surr.)	1	%	110	101
13C2-10:2 FTSA (surr.)	1	%	68	63
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 04, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220304084531-Eurofin-14
Project ID: JC0927

Order No.:
Report #: 868643
Phone: 08 8338 1009
Fax:

Received: Mar 4, 2022 4:00 PM
Due: Mar 11, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	Soil	M22-Ma09941		X	X	X
2	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	Soil	M22-Ma09942		X	X	X
3	SX_OB_20220303_16_19_SS_Primary_EUF	Mar 03, 2022	4:19PM	Soil	M22-Ma09943		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	Soil	M22-Ma09944		X	X	X
5	SX_OB_20220303_20_10_SS_Primary_EUF	Mar 03, 2022	8:10PM	Soil	M22-Ma09945		X	X	X
6	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	Soil	M22-Ma09946		X	X	X
7	SX_OB_20220304_04_02_S	Mar 04, 2022	4:02AM	Soil	M22-Ma09947		X	X	X

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	Soil	M22-Ma09948		X	X	X
9	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	Soil	M22-Ma09949		X	X	X
10	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	AUS Leachate - pH 5.0	M22-Ma09950	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	AUS Leachate - pH 5.0	M22-Ma09951	X		X	
12	SX_OB_20220303_16_19_SS_Primary_EUF	Mar 03, 2022	4:19PM	AUS Leachate - pH 5.0	M22-Ma09952	X		X	
13	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	AUS Leachate - pH 5.0	M22-Ma09953	X		X	
14	SX_OB_20220303_20_10_S	Mar 03, 2022	8:10PM	AUS Leachate - pH 5.0	M22-Ma09954	X		X	

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Received: Mar 4, 2022 4:00 PM
Due: Mar 11, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	AUS Leachate - pH 5.0	M22-Ma09955	X		X	
16	SX_OB_20220304_04_02_SS_Primary_EUF	Mar 04, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma09956	X		X	
17	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	AUS Leachate - pH 5.0	M22-Ma09957	X		X	

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Due: Mar 11, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
18	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	AUS Leachate - pH 5.0	M22-Ma09958	X		X	
19	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	AUS Leachate - Reagent Water	M22-Ma09959	X		X	
20	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	AUS Leachate - Reagent Water	M22-Ma09960	X		X	
21	SX_OB_20220303_16_19_S	Mar 03, 2022	4:19PM	AUS Leachate - Reagent	M22-Ma09961	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220304084531-Eurofin-14
Project ID: JC0927

Order No.:
Report #: 868643
Phone: 08 8338 1009
Fax:

Received: Mar 4, 2022 4:00 PM
Due: Mar 11, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
22	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	AUS Leachate - Reagent Water	M22-Ma09962	X		X	
23	SX_OB_20220303_20_10_SS_Primary_EUF	Mar 03, 2022	8:10PM	AUS Leachate - Reagent Water	M22-Ma09963	X		X	
24	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	AUS Leachate - Reagent Water	M22-Ma09964	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
25	SX_OB_20220304_04_02_SS_Primary_EUF	Mar 04, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma09965	X		X	
26	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	AUS Leachate - Reagent Water	M22-Ma09966	X		X	
27	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	AUS Leachate - Reagent Water	M22-Ma09967	X		X	
Test Counts						18	9	27	9

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**μg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	110			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	98			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	91			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	96			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	94			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	102			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	70			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	101			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)	%	88			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	110			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	77			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	84			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	76			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	89			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	84			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	67			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	84			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	88			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	82			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	94			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	77			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	64			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	102			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	84			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)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09955	CP	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)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09955	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09955	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09965	CP	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)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09965	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09965	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson

General Manager

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.

eurofins

Environment Testing

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

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.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention: **David Lawson**

Report **868643-S**
Project name 20220304084531-Eurofin-14
Project ID JC0927
Received Date Mar 04, 2022

Client Sample ID			**SX_OB_20220303_12_24_SS_Primary_EUF**	**SX_OB_20220303_12_25_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Primary_EUF**	**SX_OB_20220303_16_19_SS_Duplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09941**	**M22-Ma09942**	**M22-Ma09943**	**M22-Ma09944**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID **Sample Matrix** **Eurofins Sample No.** **Date Sampled** Test/Reference	LOR	Unit	SX_OB_20220303_12_24_SS_Primary_EUF Soil M22-Ma09941 Mar 03, 2022	SX_OB_20220303_12_25_SS_Primary_EUF Soil M22-Ma09942 Mar 03, 2022	SX_OB_20220303_16_19_SS_Primary_EUF Soil M22-Ma09943 Mar 03, 2022	SX_OB_20220303_16_19_SS_Duplicate_EUF Soil M22-Ma09944 Mar 03, 2022
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	59	59	64	108
Toluene-d8 (surr.)	1	%	60	60	61	101
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID **Sample Matrix** **Eurofins Sample No.** **Date Sampled** Test/Reference	LOR	Unit	SX_OB_20220303_12_24_SS_Primary_EUF Soil M22-Ma09941 Mar 03, 2022	SX_OB_20220303_12_25_SS_Primary_EUF Soil M22-Ma09942 Mar 03, 2022	SX_OB_20220303_16_19_SS_Primary_EUF Soil M22-Ma09943 Mar 03, 2022	SX_OB_20220303_16_19_SS_Duplicate_EUF Soil M22-Ma09944 Mar 03, 2022
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	72	143	92
p-Terphenyl-d14 (surr.)	1	%	95	85	54	95
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	78	65	99	102
Tetrachloro-m-xylene (surr.)	1	%	125	107	123	111

Client Sample ID			SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09941**	**M22-Ma09942**	**M22-Ma09943**	**M22-Ma09944**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	78	65	99	102
Tetrachloro-m-xylene (surr.)	1	%	125	107	123	111
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	81	79	65	51
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	390	160	210	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.0	9.0	9.0	8.9
% Moisture	1	%	30	31	31	34
Heavy Metals						
Arsenic	2	mg/kg	19	20	23	27
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	110	130	150
Copper	5	mg/kg	66	61	70	77
Lead	5	mg/kg	< 5	< 5	5.0	6.2
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09941**	**M22-Ma09942**	**M22-Ma09943**	**M22-Ma09944**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	190	180	210	230
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	130	120	130	150
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	%	148	130	128	137
13C5-PFPeA (surr.)	1	%	86	78	83	82
13C5-PFHxA (surr.)	1	%	83	77	77	78
13C4-PFHpA (surr.)	1	%	86	75	73	78
13C8-PFOA (surr.)	1	%	92	81	79	78
13C5-PFNA (surr.)	1	%	88	90	72	147
13C6-PFDA (surr.)	1	%	84	75	62	73
13C2-PFUnDA (surr.)	1	%	115	105	97	83
13C2-PFDoDA (surr.)	1	%	128	108	119	105
13C2-PFTeDA (surr.)	1	%	110	89	94	87
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
13C8-FOSA (surr.)	1	%	84	73	73	77
D3-N-MeFOSA (surr.)	1	%	109	95	93	99
D5-N-EtFOSA (surr.)	1	%	108	98	97	106
D7-N-MeFOSE (surr.)	1	%	92	79	82	94
D9-N-EtFOSE (surr.)	1	%	96	82	87	95
D5-N-EtFOSAA (surr.)	1	%	140	99	116	102
D3-N-MeFOSAA (surr.)	1	%	126	107	119	92

Client Sample ID			SX_OB_20220303_12_24_SS_Primary_EUF	SX_OB_20220303_12_25_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Primary_EUF	SX_OB_20220303_16_19_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09941**	**M22-Ma09942**	**M22-Ma09943**	**M22-Ma09944**
Date Sampled			**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**	**Mar 03, 2022**
Test/Reference	LOR	Unit				
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	%	80	70	74	71
18O2-PFHxS (surr.)	1	%	83	75	74	88
13C8-PFOS (surr.)	1	%	75	70	67	76
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	%	112	106	94	136
13C2-6:2 FTSA (surr.)	1	%	74	62	62	65
13C2-8:2 FTSA (surr.)	1	%	97	97	80	95
13C2-10:2 FTSA (surr.)	1	%	118	91	105	106
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

Client Sample ID			SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220304_08_22_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220304_08_22_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			Mar 03, 2022	Mar 04, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220304_08_22_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Volatile Organics						
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	134	76	52	55
Toluene-d8 (surr.)	1	%	133	71	99	52
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	85	67	76	68
p-Terphenyl-d14 (surr.)	1	%	104	68	73	76

Client Sample ID			SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220304_08_22_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			Mar 03, 2022	Mar 04, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	92	66	66	68
Tetrachloro-m-xylene (surr.)	1	%	108	77	94	88
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	92	66	66	68
Tetrachloro-m-xylene (surr.)	1	%	108	77	94	88
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			**SX_OB_20220303_20_10_SS_Primary_EUF**	**SX_OB_20220304_00_01_SS_Primary_EUF**	**SX_OB_20220304_04_02_SS_Primary_EUF**	**SX_OB_20220304_08_22_SS_Triplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	54	39	59	59
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	110	< 100	630	500
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.3	8.9	9.1	9.0
% Moisture	1	%	28	34	31	29
Heavy Metals						
Arsenic	2	mg/kg	21	25	25	21
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	140	140	130	120
Copper	5	mg/kg	69	75	69	66
Lead	5	mg/kg	5.1	5.2	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	200	200	200	190
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	130	150	140	130
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	%	136	133	130	120
13C5-PFPeA (surr.)	1	%	75	84	78	73
13C5-PFHxA (surr.)	1	%	74	77	78	72

Client Sample ID			**SX_OB_20220303_20_10_SS_Primary_EUF**	**SX_OB_20220304_00_01_SS_Primary_EUF**	**SX_OB_20220304_04_02_SS_Primary_EUF**	**SX_OB_20220304_08_22_SS_Triplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	80	78	76	70
13C8-PFOA (surr.)	1	%	82	85	84	75
13C5-PFNA (surr.)	1	%	109	84	77	62
13C6-PFDA (surr.)	1	%	69	81	67	63
13C2-PFUnDA (surr.)	1	%	98	97	101	90
13C2-PFDoDA (surr.)	1	%	108	117	120	108
13C2-PFTeDA (surr.)	1	%	87	102	103	86
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
13C8-FOSA (surr.)	1	%	78	75	75	67
D3-N-MeFOSA (surr.)	1	%	101	93	95	85
D5-N-EtFOSA (surr.)	1	%	106	97	94	90
D7-N-MeFOSE (surr.)	1	%	98	81	80	82
D9-N-EtFOSE (surr.)	1	%	93	85	83	78
D5-N-EtFOSAA (surr.)	1	%	108	113	113	107
D3-N-MeFOSAA (surr.)	1	%	117	112	116	112
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	%	72	73	73	64
18O2-PFHxS (surr.)	1	%	79	71	74	62
13C8-PFOS (surr.)	1	%	70	70	70	61
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	%	125	106	98	83
13C2-6:2 FTSA (surr.)	1	%	69	59	68	55

Client Sample ID			SX_OB_20220303_20_10_SS_Primary_EUF	SX_OB_20220304_00_01_SS_Primary_EUF	SX_OB_20220304_04_02_SS_Primary_EUF	SX_OB_20220304_08_22_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma09945**	**M22-Ma09946**	**M22-Ma09947**	**M22-Ma09948**
Date Sampled			**Mar 03, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	88	90	83	74
13C2-10:2 FTSA (surr.)	1	%	112	112	108	101
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

Client Sample ID			SX_OB_20220304_08_24_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5

Client Sample ID			SX_OB_20220304_08_24_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Volatile Organics			
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	98
Toluene-d8 (surr.)	1	%	94

Client Sample ID			SX_OB_20220304_08_24_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	123
p-Terphenyl-d14 (surr.)	1	%	123
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1

Client Sample ID			**SX_OB_20220304_08_24_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Dibutylchlorendate (surr.)	1	%	52
Tetrachloro-m-xylene (surr.)	1	%	85
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	52
Tetrachloro-m-xylene (surr.)	1	%	85
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	95
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	180
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9
% Moisture	1	%	29
Heavy Metals			
Arsenic	2	mg/kg	22
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	110
Copper	5	mg/kg	83

Client Sample ID			**SX_OB_20220304_08_24_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Heavy Metals			
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Molybdenum	5	mg/kg	< 5
Nickel	5	mg/kg	230
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	200
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	98
13C5-PFPeA (surr.)	1	%	113
13C5-PFHxA (surr.)	1	%	100
13C4-PFHpA (surr.)	1	%	99
13C8-PFOA (surr.)	1	%	125
13C5-PFNA (surr.)	1	%	54
13C6-PFDA (surr.)	1	%	85
13C2-PFUnDA (surr.)	1	%	136
13C2-PFDoDA (surr.)	1	%	79
13C2-PFTeDA (surr.)	1	%	104
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	98
D3-N-MeFOSA (surr.)	1	%	119
D5-N-EtFOSA (surr.)	1	%	120
D7-N-MeFOSE (surr.)	1	%	114
D9-N-EtFOSE (surr.)	1	%	109
D5-N-EtFOSAA (surr.)	1	%	97
D3-N-MeFOSAA (surr.)	1	%	107

Client Sample ID			**SX_OB_20220304_08_24_SS_Primary_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma09949**
Date Sampled			**Mar 04, 2022**
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	92
18O2-PFHxS (surr.)	1	%	66
13C8-PFOS (surr.)	1	%	70
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	131
13C2-6:2 FTSA (surr.)	1	%	139
13C2-8:2 FTSA (surr.)	1	%	98
13C2-10:2 FTSA (surr.)	1	%	136
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 05, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 05, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 05, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
- Method: LTM-INO-4100 Analysis of Cr6+ by Discrete Analyser			
Cyanide (total)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 07, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 05, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 04, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 04, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name:	Agon Environmental Pty Ltd - VIC	**Order No.:**		**Received:**	Mar 4, 2022 4:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	**Report #:**	868643	**Due:**	Mar 11, 2022
		Phone:	08 8338 1009	**Priority:**	5 Day
		Fax:		**Contact Name:**	Agon Lab Reports (Spoil Project)
Project Name:	20220304084531-Eurofin-14				
Project ID:	JC0927				

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	Soil	M22-Ma09941		X	X	X
2	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	Soil	M22-Ma09942		X	X	X
3	SX_OB_20220303_16_19_SS_Primary_EUF	Mar 03, 2022	4:19PM	Soil	M22-Ma09943		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	Soil	M22-Ma09944		X	X	X
5	SX_OB_20220303_20_10_SS_Primary_EUF	Mar 03, 2022	8:10PM	Soil	M22-Ma09945		X	X	X
6	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	Soil	M22-Ma09946		X	X	X
7	SX_OB_20220304_04_02_S	Mar 04, 2022	4:02AM	Soil	M22-Ma09947		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	Soil	M22-Ma09948		X	X	X
9	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	Soil	M22-Ma09949		X	X	X
10	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	AUS Leachate - pH 5.0	M22-Ma09950	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	AUS Leachate - pH 5.0	M22-Ma09951	X		X	
12	SX_OB_20220303_16_19_SS_Primary_EUF	Mar 03, 2022	4:19PM	AUS Leachate - pH 5.0	M22-Ma09952	X		X	
13	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	AUS Leachate - pH 5.0	M22-Ma09953	X		X	
14	SX_OB_20220303_20_10_S	Mar 03, 2022	8:10PM	AUS Leachate - pH 5.0	M22-Ma09954	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	AUS Leachate - pH 5.0	M22-Ma09955	X		X	
16	SX_OB_20220304_04_02_SS_Primary_EUF	Mar 04, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma09956	X		X	
17	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	AUS Leachate - pH 5.0	M22-Ma09957	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
18	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	AUS Leachate - pH 5.0	M22-Ma09958	X		X	
19	SX_OB_20220303_12_24_SS_Primary_EUF	Mar 03, 2022	12:24PM	AUS Leachate - Reagent Water	M22-Ma09959	X		X	
20	SX_OB_20220303_12_25_SS_Primary_EUF	Mar 03, 2022	12:25PM	AUS Leachate - Reagent Water	M22-Ma09960	X		X	
21	SX_OB_20220303_16_19_S	Mar 03, 2022	4:19PM	AUS Leachate - Reagent	M22-Ma09961	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
22	SX_OB_20220303_16_19_SS_Duplicate_EUF	Mar 03, 2022	4:19PM	AUS Leachate - Reagent Water	M22-Ma09962	X		X	
23	SX_OB_20220303_20_10_SS_Primary_EUF	Mar 03, 2022	8:10PM	AUS Leachate - Reagent Water	M22-Ma09963	X		X	
24	SX_OB_20220304_00_01_SS_Primary_EUF	Mar 04, 2022	12:01AM	AUS Leachate - Reagent Water	M22-Ma09964	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
25	SX_OB_20220304_04_02_SS_Primary_EUF	Mar 04, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma09965	X		X	
26	SX_OB_20220304_08_22_SS_Triplicate_EUF	Mar 04, 2022	8:22AM	AUS Leachate - Reagent Water	M22-Ma09966	X		X	
27	SX_OB_20220304_08_24_SS_Primary_EUF	Mar 04, 2022	8:24AM	AUS Leachate - Reagent Water	M22-Ma09967	X		X	
Test Counts						18	9	27	9

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**μg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	
Zinc	mg/kg	< 5			5	Pass	
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	109			70-130	Pass	
TRH C10-C14	%	106			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
TRH C6-C10	%	101			70-130	Pass	
TRH >C10-C16	%	112			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	105			70-130	Pass	
1.1.1-Trichloroethane	%	110			70-130	Pass	
1.2-Dichlorobenzene	%	125			70-130	Pass	
1.2-Dichloroethane	%	105			70-130	Pass	
Benzene	%	123			70-130	Pass	
Ethylbenzene	%	125			70-130	Pass	
m&p-Xylenes	%	115			70-130	Pass	
Toluene	%	125			70-130	Pass	
Trichloroethene	%	123			70-130	Pass	
Xylenes - Total*	%	104			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	104			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Anthracene	%	88			70-130	Pass	
Benz(a)anthracene	%	93			70-130	Pass	
Benzo(a)pyrene	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	%	83			70-130	Pass	
Benzo(g.h.i)perylene	%	97			70-130	Pass	
Benzo(k)fluoranthene	%	104			70-130	Pass	
Chrysene	%	94			70-130	Pass	
Dibenz(a.h)anthracene	%	89			70-130	Pass	
Fluoranthene	%	95			70-130	Pass	
Fluorene	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	90			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	96			70-130	Pass	
Pyrene	%	96			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	83			70-130	Pass	
4.4'-DDD	%	114			70-130	Pass	
4.4'-DDE	%	109			70-130	Pass	
4.4'-DDT	%	115			70-130	Pass	
a-HCH	%	76			70-130	Pass	
Aldrin	%	84			70-130	Pass	
b-HCH	%	108			70-130	Pass	
d-HCH	%	106			70-130	Pass	
Dieldrin	%	92			70-130	Pass	
Endosulfan I	%	88			70-130	Pass	
Endosulfan II	%	99			70-130	Pass	
Endosulfan sulphate	%	99			70-130	Pass	
Endrin	%	101			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
Endrin ketone	%	103			70-130	Pass	
g-HCH (Lindane)	%	82			70-130	Pass	
Heptachlor	%	92			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	86			70-130	Pass	
Methoxychlor	%	124			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	105			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	95			25-140	Pass	
2.4-Dichlorophenol	%	93			25-140	Pass	
2.4.5-Trichlorophenol	%	73			25-140	Pass	
2.4.6-Trichlorophenol	%	100			25-140	Pass	
2.6-Dichlorophenol	%	91			25-140	Pass	
4-Chloro-3-methylphenol	%	95			25-140	Pass	
Pentachlorophenol	%	89			25-140	Pass	
Tetrachlorophenols - Total	%	70			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	31			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	77			25-140	Pass	
2-Nitrophenol	%	91			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dimethylphenol	%	89			25-140	Pass	
2.4-Dinitrophenol	%	67			25-140	Pass	
2-Methylphenol (o-Cresol)	%	82			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	92			25-140	Pass	
4-Nitrophenol	%	100			25-140	Pass	
Dinoseb	%	76			25-140	Pass	
Phenol	%	97			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	98			70-130	Pass	
Cyanide (total)	%	88			70-130	Pass	
Fluoride (Total)	%	101			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	103			80-120	Pass	
Cadmium	%	103			80-120	Pass	
Chromium	%	108			80-120	Pass	
Copper	%	100			80-120	Pass	
Lead	%	104			80-120	Pass	
Mercury	%	104			80-120	Pass	
Molybdenum	%	102			80-120	Pass	
Nickel	%	103			80-120	Pass	
Selenium	%	102			80-120	Pass	
Silver	%	103			80-120	Pass	
Tin	%	101			80-120	Pass	
Zinc	%	100			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	73			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	102			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	99			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	116			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	133			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	107			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	116			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	117			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	128			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	115			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	104			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	102			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	87			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	97			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	92			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	90			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	134			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	97			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	102			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroheptanesulfonic acid (PFHpS)	%	78			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	105			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	102			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	95			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	110			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									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M22-Ma02319	NCP	%	86			70-130	Pass	
TRH >C10-C16	M22-Ma02319	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Ma12549	NCP	%	94			70-130	Pass	
4.4'-DDD	M22-Ma12549	NCP	%	127			70-130	Pass	
4.4'-DDE	M22-Ma12549	NCP	%	109			70-130	Pass	
4.4'-DDT	M22-Ma12549	NCP	%	90			70-130	Pass	
a-HCH	M22-Ma12549	NCP	%	102			70-130	Pass	
Aldrin	M22-Ma12549	NCP	%	90			70-130	Pass	
b-HCH	M22-Ma12549	NCP	%	94			70-130	Pass	
d-HCH	M22-Ma12549	NCP	%	116			70-130	Pass	
Dieldrin	M22-Ma12549	NCP	%	108			70-130	Pass	
Endosulfan I	M22-Ma12549	NCP	%	96			70-130	Pass	
Endosulfan II	M22-Ma12549	NCP	%	96			70-130	Pass	
Endosulfan sulphate	M22-Ma12549	NCP	%	93			70-130	Pass	
Endrin	M22-Ma12549	NCP	%	107			70-130	Pass	
Endrin aldehyde	M22-Ma12549	NCP	%	112			70-130	Pass	
Endrin ketone	M22-Ma12549	NCP	%	120			70-130	Pass	
g-HCH (Lindane)	M22-Ma12549	NCP	%	115			70-130	Pass	
Heptachlor	M22-Ma12549	NCP	%	101			70-130	Pass	
Heptachlor epoxide	M22-Ma12549	NCP	%	92			70-130	Pass	
Hexachlorobenzene	M22-Ma12549	NCP	%	100			70-130	Pass	
Methoxychlor	M22-Ma12549	NCP	%	105			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Ma00347	NCP	%	100			70-130	Pass	
Aroclor-1260	M22-Ma00347	NCP	%	124			70-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma06603	NCP	%	88			70-130	Pass	
Fluoride (Total)	M22-Ma05700	NCP	%	66			70-130	Fail	Q08
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	L22-Ma04503	NCP	%	97			75-125	Pass	
Cadmium	L22-Ma04503	NCP	%	97			75-125	Pass	
Chromium	L22-Ma04503	NCP	%	101			75-125	Pass	
Copper	L22-Ma04503	NCP	%	94			75-125	Pass	
Lead	L22-Ma04503	NCP	%	107			75-125	Pass	
Mercury	L22-Ma04503	NCP	%	104			75-125	Pass	
Molybdenum	L22-Ma04503	NCP	%	103			75-125	Pass	
Nickel	L22-Ma04503	NCP	%	98			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Selenium	L22-Ma04503	NCP	%	95			75-125	Pass	
Silver	L22-Ma04503	NCP	%	98			75-125	Pass	
Tin	L22-Ma04503	NCP	%	101			75-125	Pass	
Zinc	L22-Ma04503	NCP	%	96			75-125	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma09943	CP	%	91			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma09945	CP	%	78			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09945	CP	%	115			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma09945	CP	%	105			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09945	CP	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09945	CP	%	121			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09945	CP	%	137			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09945	CP	%	109			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09945	CP	%	120			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma09945	CP	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09945	CP	%	134			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09945	CP	%	122			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma09945	CP	%	124			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09945	CP	%	100			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09945	CP	%	111			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09945	CP	%	94			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09945	CP	%	106			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09945	CP	%	94			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09945	CP	%	103			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09945	CP	%	109			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09945	CP	%	127			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09945	CP	%	110			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09945	CP	%	113			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09945	CP	%	115			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09945	CP	%	55			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09945	CP	%	95			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09945	CP	%	111			50-150	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma09945	CP	%	113			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09945	CP	%	121			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09945	CP	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09945	CP	%	107			50-150	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma09946	CP	%	88			70-130	Pass	
Acenaphthylene	M22-Ma09946	CP	%	101			70-130	Pass	
Anthracene	M22-Ma09946	CP	%	87			70-130	Pass	
Benz(a)anthracene	M22-Ma09946	CP	%	74			70-130	Pass	
Benzo(a)pyrene	M22-Ma09946	CP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma09946	CP	%	103			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma09946	CP	%	97			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma09946	CP	%	100			70-130	Pass	
Chrysene	M22-Ma09946	CP	%	92			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma09946	CP	%	103			70-130	Pass	
Fluoranthene	M22-Ma09946	CP	%	106			70-130	Pass	
Fluorene	M22-Ma09946	CP	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma09946	CP	%	91			70-130	Pass	
Naphthalene	M22-Ma09946	CP	%	81			70-130	Pass	
Phenanthrene	M22-Ma09946	CP	%	76			70-130	Pass	
Pyrene	M22-Ma09946	CP	%	77			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma09946	CP	%	77			30-130	Pass	
2.4-Dichlorophenol	M22-Ma09946	CP	%	70			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma09946	CP	%	69			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma09946	CP	%	79			30-130	Pass	
2.6-Dichlorophenol	M22-Ma09946	CP	%	63			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma09946	CP	%	76			30-130	Pass	
Pentachlorophenol	M22-Ma09946	CP	%	49			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma09946	CP	%	53			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma09946	CP	%	55			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma09946	CP	%	34			30-130	Pass	
2-Nitrophenol	M22-Ma09946	CP	%	68			30-130	Pass	
2.4-Dimethylphenol	M22-Ma09946	CP	%	78			30-130	Pass	
2.4-Dinitrophenol	M22-Ma09946	CP	%	51			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma09946	CP	%	66			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma09946	CP	%	75			30-130	Pass	
4-Nitrophenol	M22-Ma09946	CP	%	57			30-130	Pass	
Dinoseb	M22-Ma09946	CP	%	31			30-130	Pass	
Phenol	M22-Ma09946	CP	%	74			30-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma09947	CP	%	74			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09947	CP	%	103			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorohexanoic acid (PFHxA)	M22-Ma09947	CP	%	100			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09947	CP	%	103			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09947	CP	%	122			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09947	CP	%	133			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09947	CP	%	133			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09947	CP	%	107			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma09947	CP	%	118			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09947	CP	%	116			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09947	CP	%	116			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma09947	CP	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09947	CP	%	96			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09947	CP	%	102			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09947	CP	%	86			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09947	CP	%	98			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09947	CP	%	87			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09947	CP	%	95			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09947	CP	%	102			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09947	CP	%	121			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09947	CP	%	106			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09947	CP	%	116			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09947	CP	%	116			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09947	CP	%	55			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09947	CP	%	96			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09947	CP	%	106			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma09947	CP	%	108			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09947	CP	%	106			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09947	CP	%	102			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09947	CP	%	122			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C15-C28	M22-Ma02323	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma02323	NCP	mg/kg	100	110	5.0	30%	Pass	
TRH >C16-C34	M22-Ma02323	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma02323	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Ma06602	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	L22-Ma04503	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	L22-Ma04503	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	L22-Ma04503	NCP	mg/kg	7.8	7.6	2.0	30%	Pass	
Copper	L22-Ma04503	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	L22-Ma04503	NCP	mg/kg	8.7	8.8	2.0	30%	Pass	
Mercury	L22-Ma04503	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	L22-Ma04503	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	L22-Ma04503	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Selenium	L22-Ma04503	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	L22-Ma04503	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	L22-Ma04503	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	L22-Ma04503	NCP	mg/kg	5.2	6.2	18	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Ma09944	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma09945	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma09945	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
2-Propanone (Acetone)	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma09945	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma09945	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma09945	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma09945	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma09945	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma09945	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma09945	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma09945	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma09946	CP	mg/kg	< 1	< 1	<1	30%	Pass	
% Moisture	M22-Ma09946	CP	%	34	34	1.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorododecanoic acid (PFDoDA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09946	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09946	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09946	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)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09946	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09946	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma09947	CP	pH Units	9.1	9.2	pass	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma09948	CP	mg/kg	< 1	< 1	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma09949	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma09949	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma09949	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma09949	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma09949	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma09949	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma09949	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma09949	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma09949	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma09949	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma09949	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma09949	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma09949	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma09949	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma09949	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma09949	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Ma09949	CP	mg/kg	180	210	13	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Michael Cassidy	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com | 07 3902 4600 EnviroSampleQLD@eurofins.com | 08 9251 9600 EnviroSampleWA@eurofins.com | 03 8564 5000 EnviroSampleVic@eurofins.com

Company AGON Environmental - Tunnel Spoil Testing
Project № JC0927
Project Manager Craig Trimbur
Sampler(s) Brandon Clarke - Agon Environmental
Louis Rose - EP Risk
Address Unit H16, 63-85 Turner St, Port Melbourne VIC 3207
Project Name 20220305044724-Eurofin-21_solid_00
EDD Format (ESdat, EQuIS etc) Esdat
Handed over by Toby - Agon
Email for Invoice finance@agonenviro.com.au
LabReports.TST@agonenviro.com.au
Email for Results LabReports.TST@agonenviro.com.au
agonenvironmental@esdat.com.au
motherhublabresults1@wgtp.com.au
Contact Name Craig Trimbur
David Lawson
Phone № +61 400 826 907 (Craig)
+61 490 411 004 (David)
Special Directions Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.

Please provide eSRN along with oter sample recipt documentation.
Purchase Order
Quote ID № Agon WGTP TST

Analyses Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing

Containers Change container type & size if necessary: 500mL Plastic | 250mL Plastic | 125mL Plastic | 200mL Amber Glass | 40mL VOA vial | 500mL PFAS Bottle | Jar (Glass or HDPE) | Other (Asbestos AS4964, WA Guidelines)

Required Turnaround Time (TAT) Default will be 5 days if not ticked
♦Surcharge will apply
☐ Overnight (reporting by 9am)♦
☐ Same day ♦ ☐ 1 day ♦
☐ 2 days ♦ ☐ 3
☑ 5 days (Standard)
☐ Other( )

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220304_12_11_SS_Primary_EUF	4/03/2022 12:11:00 PM	S	X	X	X	X	X	
2	SX_OB_20220304_16_09_SS_Primary_EUF	4/03/2022 12:09:00 PM	S	X	X	X	X	X	
3	SX_OB_20220304_16_09_SS_Duplicate_EUF	4/03/2022 12:09:00 PM	S	X	X	X	X	X	
4	SX_OB_20220304_20_09_SS_Primary_EUF	4/03/2022 20:09:00 PM	S	X	X	X	X	X	
5	SX_OB_20220305_04_02_SS_Primary_EUF	5/03/2022 4:02:00 PM	S	X	X	X	X	X	
6									
7									
8									
9									
10									
11									
12									
13									
	Total Counts			5	5	5	5	5	

Method of Shipment ☐ Courier (#) ☐ Hand Delivered ☐ Postal Name Signature Date Time

Laboratory Use Only
Received By Jake SYD | BNE | [✓ MEL] | PER | ADL | NTL | DRW Signature Date 5/3 Time 10:10 Temperature 15.0
Received By SYD | BNE | MEL | PER | ADL | NTL | DRW Signature Date Time Report № 868800

Eurofins Environment Testing Australia Pty Ltd

#AU_CAU001_EnviroSampleVic

From: Michael Cassidy
Sent: Tuesday, 8 March 2022 1:56 PM
To: Mary Makarios; #AU_CAU001_EnviroSampleVic
Cc: Harry Bacalis
Subject: FW: Eurofins Sample Receipt Advice - Report 868800 : Site 20220305044724-Eurofin-21 (JC0927)
Attachments: 868800_COC.pdf; 868800_sample_receipt_coc.pdf; 868800_summary.pdf

INFO: INTERNAL EMAIL - Sent from your own Eurofins email domain.

Hi Mary,

This one has now been changed to 3 day TAT,

@Canh, can you please attach this email in ELVIS?

868800
E7
8/3/22

Thanks,

Kind Regards,

Michael Cassidy

Phone: 8564 5940
Mobile: 0498 700 069
Email : MichaelCassidy@eurofins.com

From: Labreports.TST <labreports.tst@agonenviro.com.au>
Sent: Tuesday, 8 March 2022 1:36 PM
To: Michael Cassidy <MichaelCassidy@eurofins.com>
Cc: Craig Trimbur <Craig.Trimbur@eprisk.com.au>
Subject: FW: Eurofins Sample Receipt Advice - Report 868800 : Site 20220305044724-Eurofin-21 (JC0927)

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.
Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Hi Michael,

Can you please clarify the due date for this report.
Is it factoring in the public holiday next week?

We will need this report delivered by the 11th.

Regards,

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

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.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention:	**David Lawson**
Report	**868800-L**
Project name	20220305044724-Eurofin-21
Project ID	JC0927
Received Date	Mar 05, 2022

Client Sample ID			**SX_OB_20220403_12_11_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_DUPLICATE_EUF**	**SX_OB_20220403_20_09_SS_PRIMARY_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma11110**	**M22-Ma11111**	**M22-Ma11112**	**M22-Ma11113**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.1	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
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	%	91	89	87	95
13C5-PFPeA (surr.)	1	%	79	84	81	86
13C5-PFHxA (surr.)	1	%	80	81	76	85
13C4-PFHpA (surr.)	1	%	85	84	78	89
13C8-PFOA (surr.)	1	%	60	73	60	45
13C5-PFNA (surr.)	1	%	78	84	79	83
13C6-PFDA (surr.)	1	%	78	76	65	73
13C2-PFUnDA (surr.)	1	%	62	67	54	56
13C2-PFDoDA (surr.)	1	%	59	63	49	51
13C2-PFTeDA (surr.)	1	%	24	26	18	24
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

Client Sample ID			SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	SX_OB_20220403_20_09_SS_PRIMARY_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma11110**	**M22-Ma11111**	**M22-Ma11112**	**M22-Ma11113**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
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	%	88	92	77	81
D3-N-MeFOSA (surr.)	1	%	79	83	50	72
D5-N-EtFOSA (surr.)	1	%	98	104	63	91
D7-N-MeFOSE (surr.)	1	%	74	72	61	65
D9-N-EtFOSE (surr.)	1	%	76	73	58	65
D5-N-EtFOSAA (surr.)	1	%	30	24	25	25
D3-N-MeFOSAA (surr.)	1	%	25	26	26	26
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	71	71	68	62
18O2-PFHxS (surr.)	1	%	92	87	82	89
13C8-PFOS (surr.)	1	%	83	84	77	74
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	%	63	61	61	70
13C2-6:2 FTSA (surr.)	1	%	108	96	95	115
13C2-8:2 FTSA (surr.)	1	%	126	126	115	121
13C2-10:2 FTSA (surr.)	1	%	78	76	64	54
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**	**SX_OB_20220403_12_11_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_DUPLICATE_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma11114**	**M22-Ma11115**	**M22-Ma11116**	**M22-Ma11117**
Date Sampled			**Mar 05, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	6.0	6.0	6.0
pH (off)	0.1	pH Units	5.3	8.9	9.0	9.3
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	92	81	79	88
13C5-PFPeA (surr.)	1	%	89	72	76	81
13C5-PFHxA (surr.)	1	%	78	74	70	81
13C4-PFHpA (surr.)	1	%	84	74	75	85
13C8-PFOA (surr.)	1	%	37	54	63	67
13C5-PFNA (surr.)	1	%	79	72	72	81
13C6-PFDA (surr.)	1	%	66	62	66	79
13C2-PFUnDA (surr.)	1	%	53	54	53	67
13C2-PFDoDA (surr.)	1	%	52	49	43	57
13C2-PFTeDA (surr.)	1	%	18	20	13	21
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	%	84	82	74	86
D3-N-MeFOSA (surr.)	1	%	45	57	42	60
D5-N-EtFOSA (surr.)	1	%	55	69	48	70
D7-N-MeFOSE (surr.)	1	%	61	59	52	66
D9-N-EtFOSE (surr.)	1	%	58	56	50	63
D5-N-EtFOSAA (surr.)	1	%	21	26	25	32
D3-N-MeFOSAA (surr.)	1	%	20	26	25	29

Client Sample ID			SX_OB_20220503_04_02_SS_PRIMARY_EUF	SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma11114**	**M22-Ma11115**	**M22-Ma11116**	**M22-Ma11117**
Date Sampled			Mar 05, 2022	Mar 04, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
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	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	59	68	70	73
18O2-PFHxS (surr.)	1	%	84	81	79	83
13C8-PFOS (surr.)	1	%	75	70	65	79
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	%	66	60	61	67
13C2-6:2 FTSA (surr.)	1	%	122	92	83	107
13C2-8:2 FTSA (surr.)	1	%	132	106	109	131
13C2-10:2 FTSA (surr.)	1	%	60	63	54	71
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220403_20_09_SS_PRIMARY_EUF	SX_OB_20220503_04_02_SS_PRIMARY_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma11118**	**M22-Ma11119**
Date Sampled			Mar 04, 2022	Mar 05, 2022
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid[C01]		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.0	6.0
pH (off)	0.1	pH Units	9.0	9.1

Client Sample ID			**SX_OB_20220403_20_09_SS_PRIMARY_EUF**	**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma11118**	**M22-Ma11119**
Date Sampled			**Mar 04, 2022**	**Mar 05, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	59	81
13C5-PFPeA (surr.)	1	%	55	71
13C5-PFHxA (surr.)	1	%	55	66
13C4-PFHpA (surr.)	1	%	61	76
13C8-PFOA (surr.)	1	%	38	34
13C5-PFNA (surr.)	1	%	56	75
13C6-PFDA (surr.)	1	%	51	72
13C2-PFUnDA (surr.)	1	%	42	51
13C2-PFDoDA (surr.)	1	%	33	44
13C2-PFTeDA (surr.)	1	%	11	21
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	64	67
D3-N-MeFOSA (surr.)	1	%	30	22
D5-N-EtFOSA (surr.)	1	%	39	23
D7-N-MeFOSE (surr.)	1	%	44	31
D9-N-EtFOSE (surr.)	1	%	43	31
D5-N-EtFOSAA (surr.)	1	%	24	18
D3-N-MeFOSAA (surr.)	1	%	21	19
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	0.01	ug/L	< 0.01	< 0.01

Client Sample ID			**SX_OB_20220403_20_09_SS_PRIMARY_EUF**	**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma11118**	**M22-Ma11119**
Date Sampled			**Mar 04, 2022**	**Mar 05, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	N090.02
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	54	53
18O2-PFHxS (surr.)	1	%	70	77
13C8-PFOS (surr.)	1	%	60	71
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)N11	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)N11	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	48	60
13C2-6:2 FTSA (surr.)	1	%	75	90
13C2-8:2 FTSA (surr.)	1	%	73	102
13C2-10:2 FTSA (surr.)	1	%	42	53
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	0.02
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	0.02
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	0.02
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 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
AUS Leaching Procedure			
pH (initial)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 05, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 05, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220305044724-Eurofin-21
Project ID: JC0927

Order No.:
Report #: 868800
Phone: 08 8338 1009
Fax:

Received: Mar 5, 2022 10:10 AM
Due: Mar 15, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	Soil	M22-Ma11105		X	X	X
2	SX_OB_20220403_16_09_SS_PRIMARY_EUF	Mar 04, 2022	4:09PM	Soil	M22-Ma11106		X	X	X
3	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	Soil	M22-Ma11107		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220403_20_09_SS_PRIMARY_EUF	Mar 04, 2022	8:09PM	Soil	M22-Ma11108		X	X	X
5	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	Soil	M22-Ma11109		X	X	X
6	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	AUS Leachate - pH 5.0	M22-Ma11110	X		X	
7	SX_OB_20220403_16_09_S	Mar 04, 2022	4:09PM	AUS Leachate - pH 5.0	M22-Ma11111	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_PRIMARY_EUF								
8	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	AUS Leachate - pH 5.0	M22-Ma11112	X		X	
9	SX_OB_20220403_20_09_SS_PRIMARY_EUF	Mar 04, 2022	8:09PM	AUS Leachate - pH 5.0	M22-Ma11113	X		X	
10	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma11114	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	AUS Leachate - Reagent Water	M22-Ma11115	X		X	
12	SX_OB_20220403_16_09_SS_PRIMARY_EUF	Mar 04, 2022	4:09PM	AUS Leachate - Reagent Water	M22-Ma11116	X		X	
13	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	AUS Leachate - Reagent Water	M22-Ma11117	X		X	
14	SX_OB_20220403_20_09_S	Mar 04, 2022	8:09PM	AUS Leachate - Reagent	M22-Ma11118	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_PRIMARY_EUF			Water					
15	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma11119	X		X	
Test Counts						10	5	15	5

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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)	%	85			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	117			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	100			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	99			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	107			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	113			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	108			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	110			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	88			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	113			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	105			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	95			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	101			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	84			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	91			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	81			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	95			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	70			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	93			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	91			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	96			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	112			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	83			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	96			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	106			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	95			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)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma11111	CP	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)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma11111	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma11111	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

eurofins

Environment Testing

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

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.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063

Attention:	**David Lawson**
Report	**868800-S**
Project name	20220305044724-Eurofin-21
Project ID	JC0927
Received Date	Mar 05, 2022

Client Sample ID			**SX_OB_20220403_12_11_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_DUPLICATE_EUF**	**SX_OB_20220403_20_09_SS_PRIMARY_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	31	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	SX_OB_20220403_20_09_SS_PRIMARY_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			Mar 04, 2022	Mar 04, 2022	Mar 04, 2022	Mar 04, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	50	56	65	110
Toluene-d8 (surr.)	1	%	57	63	73	122
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	SX_OB_20220403_20_09_SS_PRIMARY_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	54	117	67	81
p-Terphenyl-d14 (surr.)	1	%	68	138	77	76
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	104	99	69	88
Tetrachloro-m-xylene (surr.)	1	%	77	137	104	97

Client Sample ID			SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	SX_OB_20220403_20_09_SS_PRIMARY_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	104	99	69	88
Tetrachloro-m-xylene (surr.)	1	%	77	137	104	97
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	58	34	79	61
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	230	< 100	< 100	120
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9	8.9	9.2	8.7
% Moisture	1	%	33	31	34	36
Heavy Metals						
Arsenic	2	mg/kg	26	27	19	19
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	140	150	130	140
Copper	5	mg/kg	71	80	62	70
Lead	5	mg/kg	5.6	5.8	5.6	5.7
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220403_12_11_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_PRIMARY_EUF	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	SX_OB_20220403_20_09_SS_PRIMARY_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	170	210	180	170
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	130	150	120	130
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	%	136	133	129	126
13C5-PFPeA (surr.)	1	%	89	78	78	76
13C5-PFHxA (surr.)	1	%	81	74	77	75
13C4-PFHpA (surr.)	1	%	77	75	76	74
13C8-PFOA (surr.)	1	%	86	85	77	71
13C5-PFNA (surr.)	1	%	68	125	77	84
13C6-PFDA (surr.)	1	%	72	75	69	66
13C2-PFUnDA (surr.)	1	%	104	90	90	89
13C2-PFDoDA (surr.)	1	%	128	106	119	111
13C2-PFTeDA (surr.)	1	%	102	85	99	93
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
13C8-FOSA (surr.)	1	%	78	77	74	71
D3-N-MeFOSA (surr.)	1	%	97	101	96	92
D5-N-EtFOSA (surr.)	1	%	103	107	99	98
D7-N-MeFOSE (surr.)	1	%	84	95	81	81
D9-N-EtFOSE (surr.)	1	%	90	91	84	82
D5-N-EtFOSAA (surr.)	1	%	132	100	116	110
D3-N-MeFOSAA (surr.)	1	%	128	102	107	113

Client Sample ID			**SX_OB_20220403_12_11_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_PRIMARY_EUF**	**SX_OB_20220403_16_09_SS_DUPLICATE_EUF**	**SX_OB_20220403_20_09_SS_PRIMARY_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma11105**	**M22-Ma11106**	**M22-Ma11107**	**M22-Ma11108**
Date Sampled			**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**	**Mar 04, 2022**
Test/Reference	LOR	Unit				
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	%	75	73	71	68
18O2-PFHxS (surr.)	1	%	77	77	68	66
13C8-PFOS (surr.)	1	%	60	70	61	62
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	%	106	117	104	93
13C2-6:2 FTSA (surr.)	1	%	67	60	70	60
13C2-8:2 FTSA (surr.)	1	%	81	92	85	79
13C2-10:2 FTSA (surr.)	1	%	102	111	95	102
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

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene^{N02}	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)^{N04}	20	mg/kg	< 20

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)^{N01}	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Volatile Organics			
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	66
Toluene-d8 (surr.)	1	%	60
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene^{N07}	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	62
p-Terphenyl-d14 (surr.)	1	%	83

Client Sample ID			SX_OB_20220503_04_02_SS_PRIMARY_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	70
Tetrachloro-m-xylene (surr.)	1	%	118
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	70
Tetrachloro-m-xylene (surr.)	1	%	118
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	75
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	140
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.5
% Moisture	1	%	32
Heavy Metals			
Arsenic	2	mg/kg	24
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	120
Copper	5	mg/kg	78
Lead	5	mg/kg	5.3
Mercury	0.1	mg/kg	< 0.1
Molybdenum	5	mg/kg	< 5
Nickel	5	mg/kg	200
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	130
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	129
13C5-PFPeA (surr.)	1	%	84
13C5-PFHxA (surr.)	1	%	76

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C4-PFHpA (surr.)	1	%	77
13C8-PFOA (surr.)	1	%	69
13C5-PFNA (surr.)	1	%	90
13C6-PFDA (surr.)	1	%	75
13C2-PFUnDA (surr.)	1	%	97
13C2-PFDoDA (surr.)	1	%	112
13C2-PFTeDA (surr.)	1	%	91
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)^{N11}	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)^{N11}	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)^{N11}	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)^{N11}	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)^{N11}	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)^{N11}	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)^{N11}	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	76
D3-N-MeFOSA (surr.)	1	%	97
D5-N-EtFOSA (surr.)	1	%	95
D7-N-MeFOSE (surr.)	1	%	79
D9-N-EtFOSE (surr.)	1	%	86
D5-N-EtFOSAA (surr.)	1	%	94
D3-N-MeFOSAA (surr.)	1	%	96
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)^{N11}	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)^{N15}	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)^{N15}	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)^{N15}	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)^{N11}	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)^{N15}	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)^{N11}	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)^{N15}	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	69
18O2-PFHxS (surr.)	1	%	71
13C8-PFOS (surr.)	1	%	67
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)^{N11}	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)^{N11}	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	96
13C2-6:2 FTSA (surr.)	1	%	64

Client Sample ID			**SX_OB_20220503_04_02_SS_PRIMARY_EUF**
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma11109**
Date Sampled			**Mar 05, 2022**
Test/Reference	LOR	Unit	
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
13C2-8:2 FTSA (surr.)	1	%	90
13C2-10:2 FTSA (surr.)	1	%	93
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 05, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 05, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 05, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 07, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 05, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 05, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 05, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 05, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220305044724-Eurofin-21
Project ID: JC0927

Order No.:
Report #: 868800
Phone: 08 8338 1009
Fax:

Received: Mar 5, 2022 10:10 AM
Due: Mar 15, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	Soil	M22-Ma11105		X	X	X
2	SX_OB_20220403_16_09_SS_PRIMARY_EUF	Mar 04, 2022	4:09PM	Soil	M22-Ma11106		X	X	X
3	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	Soil	M22-Ma11107		X	X	X

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220403_20_09_SS_PRIMARY_EUF	Mar 04, 2022	8:09PM	Soil	M22-Ma11108		X	X	X
5	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	Soil	M22-Ma11109		X	X	X
6	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	AUS Leachate - pH 5.0	M22-Ma11110	X		X	
7	SX_OB_20220403_16_09_S	Mar 04, 2022	4:09PM	AUS Leachate - pH 5.0	M22-Ma11111	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_PRIMARY_EUF								
8	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	AUS Leachate - pH 5.0	M22-Ma11112	X		X	
9	SX_OB_20220403_20_09_SS_PRIMARY_EUF	Mar 04, 2022	8:09PM	AUS Leachate - pH 5.0	M22-Ma11113	X		X	
10	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	AUS Leachate - pH 5.0	M22-Ma11114	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220403_12_11_SS_PRIMARY_EUF	Mar 04, 2022	12:11PM	AUS Leachate - Reagent Water	M22-Ma11115	X		X	
12	SX_OB_20220403_16_09_SS_PRIMARY_EUF	Mar 04, 2022	4:09PM	AUS Leachate - Reagent Water	M22-Ma11116	X		X	
13	SX_OB_20220403_16_09_SS_DUPLICATE_EUF	Mar 04, 2022	4:09PM	AUS Leachate - Reagent Water	M22-Ma11117	X		X	
14	SX_OB_20220403_20_09_S	Mar 04, 2022	8:09PM	AUS Leachate - Reagent	M22-Ma11118	X		X	

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Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	WRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_PRIMARY_EUF			Water					
15	SX_OB_20220503_04_02_SS_PRIMARY_EUF	Mar 05, 2022	4:02AM	AUS Leachate - Reagent Water	M22-Ma11119	X		X	
Test Counts						10	5	15	5

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**µg/L:** micrograms per litre
ppm: parts per million	**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

Terms

APHA	American Public Health Association
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 a moisture has been determined on a solid sample the result is expressed on a dry 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 is representative of 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 like compound to the analyte target and reported as percentage recovery.
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 5.4
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 be used as a guide only 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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. 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							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	117			70-130	Pass	
TRH C10-C14	%	123			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
TRH C6-C10	%	116			70-130	Pass	
TRH >C10-C16	%	128			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	88			70-130	Pass	
1.1.1-Trichloroethane	%	107			70-130	Pass	
1.2-Dichlorobenzene	%	112			70-130	Pass	
1.2-Dichloroethane	%	118			70-130	Pass	
Benzene	%	106			70-130	Pass	
Ethylbenzene	%	115			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	119			70-130	Pass	
Toluene	%	115			70-130	Pass	
Trichloroethene	%	121			70-130	Pass	
Xylenes - Total*	%	120			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	97			70-130	Pass	
Acenaphthylene	%	89			70-130	Pass	
Anthracene	%	94			70-130	Pass	
Benz(a)anthracene	%	107			70-130	Pass	
Benzo(a)pyrene	%	87			70-130	Pass	
Benzo(b&j)fluoranthene	%	104			70-130	Pass	
Benzo(g.h.i)perylene	%	81			70-130	Pass	
Benzo(k)fluoranthene	%	86			70-130	Pass	
Chrysene	%	123			70-130	Pass	
Dibenz(a.h)anthracene	%	94			70-130	Pass	
Fluoranthene	%	129			70-130	Pass	
Fluorene	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	119			70-130	Pass	
Naphthalene	%	116			70-130	Pass	
Phenanthrene	%	119			70-130	Pass	
Pyrene	%	108			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	100			70-130	Pass	
4.4'-DDD	%	106			70-130	Pass	
4.4'-DDE	%	106			70-130	Pass	
4.4'-DDT	%	106			70-130	Pass	
a-HCH	%	99			70-130	Pass	
Aldrin	%	84			70-130	Pass	
b-HCH	%	100			70-130	Pass	
d-HCH	%	100			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	121			70-130	Pass	
Endosulfan II	%	101			70-130	Pass	
Endosulfan sulphate	%	82			70-130	Pass	
Endrin	%	93			70-130	Pass	
Endrin aldehyde	%	97			70-130	Pass	
Endrin ketone	%	90			70-130	Pass	
g-HCH (Lindane)	%	90			70-130	Pass	
Heptachlor	%	107			70-130	Pass	
Heptachlor epoxide	%	102			70-130	Pass	
Hexachlorobenzene	%	105			70-130	Pass	
Methoxychlor	%	116			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	85			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	114			25-140	Pass	
2.4-Dichlorophenol	%	50			25-140	Pass	
2.4.5-Trichlorophenol	%	102			25-140	Pass	
2.4.6-Trichlorophenol	%	113			25-140	Pass	
2.6-Dichlorophenol	%	119			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	76			25-140	Pass	
Pentachlorophenol	%	58			25-140	Pass	
Tetrachlorophenols - Total	%	67			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	86			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	90			25-140	Pass	
2-Nitrophenol	%	60			25-140	Pass	
2.4-Dimethylphenol	%	48			25-140	Pass	
2.4-Dinitrophenol	%	97			25-140	Pass	
2-Methylphenol (o-Cresol)	%	113			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	44			25-140	Pass	
4-Nitrophenol	%	93			25-140	Pass	
Dinoseb	%	90			25-140	Pass	
Phenol	%	126			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	100			70-130	Pass	
Cyanide (total)	%	88			70-130	Pass	
Fluoride (Total)	%	94			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			80-120	Pass	
Cadmium	%	106			80-120	Pass	
Chromium	%	119			80-120	Pass	
Copper	%	109			80-120	Pass	
Lead	%	118			80-120	Pass	
Mercury	%	109			80-120	Pass	
Molybdenum	%	104			80-120	Pass	
Nickel	%	119			80-120	Pass	
Selenium	%	105			80-120	Pass	
Silver	%	106			80-120	Pass	
Tin	%	103			80-120	Pass	
Zinc	%	109			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	73			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	102			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	99			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	116			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	133			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	107			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	116			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	117			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	128			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	115			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	104			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	102			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	87			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	97			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	92			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)			%	90			50-150	Pass	
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)									
Perfluorobutanesulfonic acid (PFBS)			%	94			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	134			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	97			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	102			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	78			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	105			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	102			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	95			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)			%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	110			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									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma11153	NCP	%	84			70-130	Pass	
TRH C10-C14	M22-Ma04929	NCP	%	125			70-130	Pass	
Naphthalene	M22-Ma11153	NCP	%	75			70-130	Pass	
TRH C6-C10	M22-Ma11153	NCP	%	82			70-130	Pass	
TRH >C10-C16	M22-Ma04929	NCP	%	129			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma11153	NCP	%	85			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma11153	NCP	%	94			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma11153	NCP	%	88			70-130	Pass	
1.2-Dichloroethane	M22-Ma11153	NCP	%	94			70-130	Pass	
Benzene	M22-Ma11153	NCP	%	83			70-130	Pass	
Ethylbenzene	M22-Ma11153	NCP	%	81			70-130	Pass	
m&p-Xylenes	M22-Ma11153	NCP	%	84			70-130	Pass	
o-Xylene	M22-Ma11153	NCP	%	91			70-130	Pass	
Toluene	M22-Ma11153	NCP	%	86			70-130	Pass	
Trichloroethene	M22-Ma11153	NCP	%	82			70-130	Pass	
Xylenes - Total*	M22-Ma11153	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma02324	NCP	%	78			70-130	Pass	
Acenaphthylene	M22-Ma02324	NCP	%	87			70-130	Pass	
Anthracene	M22-Ma02324	NCP	%	102			70-130	Pass	
Benz(a)anthracene	M22-Ma02324	NCP	%	103			70-130	Pass	
Benzo(a)pyrene	M22-Ma02324	NCP	%	84			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma02324	NCP	%	99			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma02324	NCP	%	82			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma02324	NCP	%	104			70-130	Pass	
Chrysene	M22-Ma02324	NCP	%	80			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma02324	NCP	%	106			70-130	Pass	
Fluoranthene	M22-Ma02324	NCP	%	88			70-130	Pass	
Fluorene	M22-Ma02324	NCP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma02324	NCP	%	82			70-130	Pass	
Naphthalene	M22-Ma02324	NCP	%	76			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenanthrene	M22-Ma02324	NCP	%	77			70-130	Pass	
Pyrene	M22-Ma02324	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Ma00368	NCP	%	84			70-130	Pass	
4.4'-DDD	M22-Ma00368	NCP	%	106			70-130	Pass	
4.4'-DDE	M22-Ma00368	NCP	%	80			70-130	Pass	
4.4'-DDT	M22-Ma11163	NCP	%	116			70-130	Pass	
a-HCH	M22-Ma00368	NCP	%	98			70-130	Pass	
Aldrin	M22-Ma00368	NCP	%	92			70-130	Pass	
b-HCH	M22-Ma00368	NCP	%	82			70-130	Pass	
d-HCH	M22-Ma00368	NCP	%	90			70-130	Pass	
Dieldrin	M22-Ma00368	NCP	%	77			70-130	Pass	
Endosulfan I	M22-Ma00368	NCP	%	87			70-130	Pass	
Endosulfan II	M22-Ma00368	NCP	%	72			70-130	Pass	
Endosulfan sulphate	M22-Ma00368	NCP	%	74			70-130	Pass	
Endrin	M22-Ma00368	NCP	%	89			70-130	Pass	
Endrin aldehyde	M22-Ma00368	NCP	%	100			70-130	Pass	
Endrin ketone	M22-Ma00368	NCP	%	84			70-130	Pass	
g-HCH (Lindane)	M22-Ma00368	NCP	%	95			70-130	Pass	
Heptachlor	M22-Ma00368	NCP	%	77			70-130	Pass	
Heptachlor epoxide	M22-Ma00368	NCP	%	72			70-130	Pass	
Hexachlorobenzene	M22-Ma00368	NCP	%	73			70-130	Pass	
Methoxychlor	M22-Ma00368	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Fe58219	NCP	%	123			70-130	Pass	
Aroclor-1260	M22-Fe58219	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma02324	NCP	%	84			30-130	Pass	
2.4-Dichlorophenol	M22-Ma02324	NCP	%	101			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma02324	NCP	%	68			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma02324	NCP	%	74			30-130	Pass	
2.6-Dichlorophenol	M22-Ma02324	NCP	%	80			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma02324	NCP	%	81			30-130	Pass	
Pentachlorophenol	M22-Ma02324	NCP	%	52			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma02324	NCP	%	48			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma07463	NCP	%	107			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma07463	NCP	%	91			30-130	Pass	
2-Nitrophenol	M22-Ma02324	NCP	%	119			30-130	Pass	
2.4-Dimethylphenol	M22-Ma02324	NCP	%	95			30-130	Pass	
2.4-Dinitrophenol	M22-Ma07463	NCP	%	63			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma02324	NCP	%	75			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma02324	NCP	%	89			30-130	Pass	
4-Nitrophenol	M22-Ma02324	NCP	%	42			30-130	Pass	
Dinoseb	M22-Ma02324	NCP	%	39			30-130	Pass	
Phenol	M22-Ma02324	NCP	%	90			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma06603	NCP	%	88			70-130	Pass	
Fluoride (Total)	M22-Ma05700	NCP	%	66			70-130	Fail	Q08

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma07156	NCP	%	98			75-125	Pass	
Cadmium	M22-Ma07156	NCP	%	78			75-125	Pass	
Chromium	M22-Ma07156	NCP	%	100			75-125	Pass	
Copper	M22-Ma07156	NCP	%	99			75-125	Pass	
Lead	M22-Ma07156	NCP	%	104			75-125	Pass	
Mercury	M22-Ma07156	NCP	%	120			75-125	Pass	
Molybdenum	M22-Ma07156	NCP	%	106			75-125	Pass	
Nickel	M22-Ma07156	NCP	%	100			75-125	Pass	
Selenium	M22-Ma07156	NCP	%	94			75-125	Pass	
Silver	M22-Ma07156	NCP	%	78			75-125	Pass	
Tin	M22-Ma07156	NCP	%	107			75-125	Pass	
Zinc	M22-Ma07156	NCP	%	97			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma09945	NCP	%	78			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma09945	NCP	%	115			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma09945	NCP	%	105			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma09945	NCP	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma09945	NCP	%	121			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma09945	NCP	%	137			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma09945	NCP	%	109			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma09945	NCP	%	120			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma09945	NCP	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma09945	NCP	%	134			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma09945	NCP	%	122			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma09945	NCP	%	124			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma09945	NCP	%	100			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma09945	NCP	%	111			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma09945	NCP	%	94			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma09945	NCP	%	106			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma09945	NCP	%	94			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma09945	NCP	%	103			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma09945	NCP	%	109			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma09945	NCP	%	127			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma09945	NCP	%	110			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma09945	NCP	%	113			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma09945	NCP	%	115			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma09945	NCP	%	55			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma09945	NCP	%	95			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma09945	NCP	%	111			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma09945	NCP	%	113			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma09945	NCP	%	121			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma09945	NCP	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma09945	NCP	%	107			50-150	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma11108	CP	%	91			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma11509	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma00688	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma00688	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma00688	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma11509	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma00688	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma00688	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma00688	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.4-Dichlorobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma11509	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma11509	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma11509	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma11509	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma11509	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma11509	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma11509	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Phenanthrene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma04527	NCP	mg/kg	0.07	0.07	6.0	30%	Pass	
Endosulfan I	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	B22-Ma00108	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma04527	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma04527	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma04527	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma04527	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	B22-Ma00108	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma04527	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma04527	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma04527	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma04527	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma04527	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma04527	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma04527	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma04527	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma04527	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
4-Nitrophenol	M22-Ma04527	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma04527	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma04527	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma11317	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Cyanide (total)	M22-Ma06602	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma09949	NCP	mg/kg	180	210	13	30%	Pass	
% Moisture	M22-Ma11105	CP	%	33	33	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma03468	NCP	mg/kg	3.9	4.0	2.0	30%	Pass	
Cadmium	M22-Ma03468	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma03468	NCP	mg/kg	17	16	9.0	30%	Pass	
Copper	M22-Ma03468	NCP	mg/kg	8.9	8.2	8.0	30%	Pass	
Lead	M22-Ma03468	NCP	mg/kg	6.4	6.0	6.0	30%	Pass	
Mercury	M22-Ma03468	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma03468	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma03468	NCP	mg/kg	6.9	6.2	10	30%	Pass	
Selenium	M22-Ma03468	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma03468	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma03468	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma03468	NCP	mg/kg	17	16	5.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma11105	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma11105	CP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma11105	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)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma11105	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma11105	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma11106	CP	pH Units	8.9	8.9	pass	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma11106	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma11106	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma11106	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)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma11106	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma11106	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Michael Cassidy	Analytical Services Manager
Vivian Wang	Senior Analyst-Volatile (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

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.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order : **EM2203621**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : CRAIG TRIMBUR
Address : D1.1 63-85 TURNER STREET
PORT MELBOURNE 3207
Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220302050132-ALS-21
Sampler : Louis - EP Risk, Luke
Site : ----
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 16
No. of samples analysed : 16

Page : 1 of 27
Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +6138549 9600
Date Samples Received : 02-Mar-2022 12:40
Date Analysis Commenced : 04-Mar-2022
Issue Date : 09-Mar-2022 17:57

ilac-MRA NATA
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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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.

- EG048G: EM2203517 #19 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EG005T: EM2203621 #8 has been diluted prior to cadmium analysis due to sample matrix. LOR values have been raised accordingly.
- EP231X: Poor matrix spike recovery for sample EM2203621-010 due to sample matrix interference.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

			Sample ID	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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: **ASLP LEACHATE**
(Matrix: **WATER**)

			Sample ID	SX_OB_20220301_08_53_SS_Primary_ALS	SX_OB_20220301_08_53_SS_Duplicate_ALS	SX_OB_20220301_12_04_SS_Primary_ALS	SX_OB_20220301_16_31_SS_Triplicate_ALS	SX_OB_20220301_16_28_SS_Primary_ALS
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	CAS Number	LOR	Unit	EM2203621-001	EM2203621-002	EM2203621-003	EM2203621-004	EM2203621-005
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**97.2**	**93.2**	**97.0**	**96.4**	**99.2**
13C8-PFOA	----	0.02	%	**102**	**104**	**108**	**106**	**103**

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	----	----
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	----	----
Compound	CAS Number	LOR	Unit	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	--------	--------
				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	0.05	µg/L	<0.05	<0.05	<0.05	----	----
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	0.05	µg/L	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	----	----
Compound	CAS Number	LOR	Unit	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**--------**	**--------**
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**103**	**99.7**	**97.5**	----	----
13C8-PFOA	----	0.02	%	**106**	**103**	**105**	----	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220301_0853_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Duplicate_ALS**	**SX_OB_20220301_1204_SS_Primary_ALS**	**SX_OB_20220301_1631_SS_Triplicate_ALS**	**SX_OB_20220301_1628_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-009**	**EM2203621-010**	**EM2203621-011**	**EM2203621-012**	**EM2203621-013**
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	SX_OB_20220301_08_53_SS_Primary_ALS	SX_OB_20220301_08_53_SS_Duplicate_ALS	SX_OB_20220301_12_04_SS_Primary_ALS	SX_OB_20220301_16_31_SS_Triplicate_ALS	SX_OB_20220301_16_28_SS_Primary_ALS
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	CAS Number	LOR	Unit	EM2203621-009	EM2203621-010	EM2203621-011	EM2203621-012	EM2203621-013
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**88.8**	**106**	**92.4**	**88.9**	**100**
13C8-PFOA	----	0.02	%	**108**	**106**	**103**	**108**	**104**

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	----	----
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 12:01	02-Mar-2022 04:06	----	----
Compound	CAS Number	LOR	Unit	**EM2203621-014**	**EM2203621-015**	**EM2203621-016**	--------	--------
				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	0.05	µg/L	<0.05	<0.05	<0.05	----	----
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	0.05	µg/L	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	----	----
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 12:01	02-Mar-2022 04:06	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-014**	**EM2203621-015**	**EM2203621-016**	--------	--------
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**92.3**	**97.8**	**85.4**	----	----
13C8-PFOA	----	0.02	%	**108**	**106**	**104**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	SX_OB_20220301_08_53_SS_Primary_ALS	SX_OB_20220301_08_53_SS_Duplicate_ALS	SX_OB_20220301_12_04_SS_Primary_ALS	SX_OB_20220301_16_31_SS_Triplicate_ALS	SX_OB_20220301_16_28_SS_Primary_ALS
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**8.1**	**8.0**	**7.8**	**7.9**	**8.5**
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**32.4**	**31.9**	**30.1**	**31.3**	**29.4**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**25**	**23**	**16**	**21**	**29**
Cadmium	7440-43-9	1	mg/kg	<1	<1	**1**	<1	**1**
Chromium	7440-47-3	5	mg/kg	**98**	**93**	**104**	**101**	**104**
Copper	7440-50-8	5	mg/kg	**57**	**54**	**67**	**64**	**56**
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	**157**	**133**	**164**	**158**	**139**
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	<2
Tin	7440-31-5	10	mg/kg	<10	<10	<10	<10	<10
Zinc	7440-66-6	5	mg/kg	**102**	**86**	**110**	**98**	**91**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	**240**	**290**	**180**	**220**	**220**
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.2**	**9.2**	**9.1**	**9.2**	**9.0**
After HCl pH	----	0.1	pH Unit	**1.6**	**1.6**	**1.5**	**1.5**	**1.5**
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Final pH	----	0.1	pH Unit	**5.1**	**5.1**	**5.1**	**5.1**	**5.2**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			Sample ID	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	CAS Number	LOR	Unit	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**1.2**
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**1.2**
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL)**			*Sample ID*	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2.4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2.6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ **Chlordane**	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220301_0853_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Duplicate_ALS**	**SX_OB_20220301_1204_SS_Primary_ALS**	**SX_OB_20220301_1631_SS_Triplicate_ALS**	**SX_OB_20220301_1628_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 08:53	01-Mar-2022 08:53	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-001**	**EM2203621-002**	**EM2203621-003**	**EM2203621-004**	**EM2203621-005**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**107**	**121**	**118**	**115**	**114**
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**86.8**	**100**	**88.5**	**86.7**	**83.9**
Toluene-D8	2037-26-5	0.1	%	**84.4**	**98.3**	**86.6**	**86.2**	**84.1**
4-Bromofluorobenzene	460-00-4	0.1	%	**90.7**	**102**	**90.3**	**90.2**	**88.5**
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**85.2**	**95.8**	**88.0**	**87.1**	**82.8**
2-Chlorophenol-D4	93951-73-6	0.025	%	**80.6**	**90.6**	**83.9**	**80.7**	**77.8**
2.4.6-Tribromophenol	118-79-6	0.025	%	**80.8**	**90.6**	**81.9**	**83.2**	**77.8**
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**82.2**	**93.0**	**86.6**	**84.5**	**79.3**
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**78.1**	**87.3**	**80.3**	**76.2**	**71.5**
2-Fluorobiphenyl	321-60-8	0.025	%	**96.7**	**109**	**98.9**	**98.4**	**94.4**
Anthracene-d10	1719-06-8	0.025	%	**86.0**	**98.6**	**88.6**	**89.1**	**85.9**
4-Terphenyl-d14	1718-51-0	0.025	%	**90.5**	**105**	**94.4**	**94.4**	**91.6**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**102**	**112**	**113**	**97.1**	**92.1**
13C8-PFOA	----	0.0002	%	**112**	**103**	**107**	**107**	**110**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**7.8**	**8.4**	**8.1**	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**30.9**	**28.2**	**29.2**	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**19**	**26**	**26**	----	----
Cadmium	7440-43-9	1	mg/kg	**1**	**1**	<5	----	----
Chromium	7440-47-3	5	mg/kg	**105**	**95**	**108**	----	----
Copper	7440-50-8	5	mg/kg	**70**	**50**	**66**	----	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg	**163**	**128**	**172**	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg	<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg	**106**	**84**	**99**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	**230**	**200**	**230**	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.2**	**9.4**	**9.3**	----	----
After HCl pH	----	0.1	pH Unit	**1.6**	**1.6**	**1.6**	----	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	----	----
Final pH	----	0.1	pH Unit	**5.1**	**5.2**	**5.1**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	**8.4**	**9.6**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			Sample ID	**SX_OB_20220301_2010_SS_Primary_ALS**	**SX_OB_20220302_0001_SS_Primary_ALS**	**SX_OB_20220302_0406_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	CAS Number	LOR	Unit	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	----	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg	<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg	<0.10	<0.10	<0.10	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220301_2010_SS_Primary_ALS**	**SX_OB_20220302_0001_SS_Primary_ALS**	**SX_OB_20220302_0406_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ **Chlordane**	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**	**SX_OB_20220302_04_06_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Primary_ALS**	**SX_OB_20220301_08_53_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220301_2010_SS_Primary_ALS**	**SX_OB_20220302_0001_SS_Primary_ALS**	**SX_OB_20220302_0406_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Primary_ALS**	**SX_OB_20220301_0853_SS_Duplicate_ALS**
			Sampling date / time	02-Mar-2022 20:10	02-Mar-2022 00:01	02-Mar-2022 04:06	01-Mar-2022 08:53	01-Mar-2022 08:53
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203621-006**	**EM2203621-007**	**EM2203621-008**	**EM2203621-009**	**EM2203621-010**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**113**	**121**	**117**	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**90.5**	**80.7**	**102**	----	----
Toluene-D8	2037-26-5	0.1	%	**89.3**	**79.8**	**99.8**	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	**91.1**	**86.0**	**104**	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**86.2**	**101**	**92.2**	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**82.2**	**96.0**	**85.3**	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**82.5**	**92.7**	**87.5**	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**85.0**	**98.1**	**86.2**	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**78.2**	**91.6**	**78.2**	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	**98.2**	**115**	**103**	----	----
Anthracene-d10	1719-06-8	0.025	%	**87.6**	**102**	**93.9**	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	**92.5**	**109**	**99.3**	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**93.0**	**103**	**107**	----	----
13C8-PFOA	----	0.0002	%	**112**	**109**	**106**	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL)**			Sample ID	**SX_OB_20220301_1204_SS_Primary_ALS**	**SX_OB_20220301_1631_SS_Triplicate_ALS**	**SX_OB_20220301_1628_SS_Primary_ALS**	**SX_OB_20220301_2010_SS_Primary_ALS**	**SX_OB_20220302_0001_SS_Primary_ALS**
			Sampling date / time	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	CAS Number	LOR	Unit	**EM2203621-011**	**EM2203621-012**	**EM2203621-013**	**EM2203621-014**	**EM2203621-015**
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.5**	**9.5**	**10.0**	**9.5**	**10.1**

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL)**			Sample ID	**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**	**----**	**----**
			Sampling date / time	02-Mar-2022 04:06	----	----	----	----
Compound	CAS Number	LOR	Unit	**EM2203621-016**	**--------**	**--------**	**--------**	**--------**
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.7**	**----**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* *Low*	 *High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **DI WATER LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* *Low*	 *High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	*CAS Number*	*Recovery Limits (%)* *Low*	 *High*
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

Automated Guideline Comparison Report

EPA Victoria Publication IWRG 621 (2009) - Table 2: Soil Hazard Categorisation

Work Order	: **EM2203621**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: ----	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: ----	Telephone	: +6138549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 02-Mar-2022 12:40
Order number	: ----	Date Analysed	: 04-Mar-2022
C-O-C number	: 20220302050132-ALS-21	Date Issued	: 09-Mar-2022 18:12
No. of samples received	: 16		
No. of samples analysed	: 16	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

General Comments

This guideline comparison report **only** provides comparison of total concentration data against upper limit thresholds for the 'Fill Material', 'C', 'B' Categories in Table 2 of EPA Publication IWRG621.

This guideline comparison report is **NOT** a soil classification report. Classification of soils as Fill Material, Category C, Category B or Category A requires consideration of a number of other factors including preliminary site investigation, sampling density and statistical calculations, as set out in EPA Publication IWRG 702 and measurement uncertainty.

This guideline comparison report only provides comparison data for parameters, specifically listed within the IWRG621 (2009) guideline, that are analysed by ALS.

Only results in the 'Analytical Results' section have been compared to the guideline.

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

Summary of Thresholds Reached or Exceeded

EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Client Sample ID	*ALS Sample ID*	*Compound*	*Method*	*LOR*	*Limits*	*Result*
SX_OB_20220301_08_53_ SS_Primary_ALS	**EM2203621-001**	Arsenic	EG005T	5	*< 20 mg/kg*	**25 mg/kg**
SX_OB_20220301_08_53_ SS_Primary_ALS	**EM2203621-001**	Nickel	EG005T	5	*< 60 mg/kg*	**157 mg/kg**
SX_OB_20220301_08_53_ SS_Duplicate_ALS	**EM2203621-002**	Arsenic	EG005T	5	*< 20 mg/kg*	**23 mg/kg**
SX_OB_20220301_08_53_ SS_Duplicate_ALS	**EM2203621-002**	Nickel	EG005T	5	*< 60 mg/kg*	**133 mg/kg**
SX_OB_20220301_12_04_ SS_Primary_ALS	**EM2203621-003**	Nickel	EG005T	5	*< 60 mg/kg*	**164 mg/kg**
SX_OB_20220301_16_31_ SS_Triplicate_ALS	**EM2203621-004**	Arsenic	EG005T	5	*< 20 mg/kg*	**21 mg/kg**
SX_OB_20220301_16_31_ SS_Triplicate_ALS	**EM2203621-004**	Nickel	EG005T	5	*< 60 mg/kg*	**158 mg/kg**
SX_OB_20220301_16_28_ SS_Primary_ALS	**EM2203621-005**	Arsenic	EG005T	5	*< 20 mg/kg*	**29 mg/kg**
SX_OB_20220301_16_28_ SS_Primary_ALS	**EM2203621-005**	Nickel	EG005T	5	*< 60 mg/kg*	**139 mg/kg**
SX_OB_20220301_20_10_ SS_Primary_ALS	**EM2203621-006**	Nickel	EG005T	5	*< 60 mg/kg*	**163 mg/kg**
SX_OB_20220302_00_01_ SS_Primary_ALS	**EM2203621-007**	Arsenic	EG005T	5	*< 20 mg/kg*	**26 mg/kg**
SX_OB_20220302_00_01_ SS_Primary_ALS	**EM2203621-007**	Nickel	EG005T	5	*< 60 mg/kg*	**128 mg/kg**
SX_OB_20220302_04_06_ SS_Primary_ALS	**EM2203621-008**	Arsenic	EG005T	5	*< 20 mg/kg*	**26 mg/kg**
SX_OB_20220302_04_06_ SS_Primary_ALS	**EM2203621-008**	Cadmium	EG005T	1	*< 3 mg/kg*	<5 mg/kg
SX_OB_20220302_04_06_ SS_Primary_ALS	**EM2203621-008**	Nickel	EG005T	5	*< 60 mg/kg*	**172 mg/kg**

Analytical Results

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
			Sampling date/time			01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	**8.1**	± 0.1	**8.0**	± 0.1	**7.8**	± 0.1	**7.9**	± 0.1	**8.5**	± 0.1
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	2000	**25**	± 4	**23**	± 3	**16**	± 3	**21**	± 3	**29**	± 4
Cadmium	EG005T	1	mg/kg	----	400	<1	--	<1	--	**1**	± 0.2	<1	--	**1**	± 0.2
Copper	EG005T	5	mg/kg	----	20000	**57**	± 7	**54**	± 7	**67**	± 8	**64**	± 8	**56**	± 7
Lead	EG005T	5	mg/kg	----	6000	<5	--	<5	--	<5	--	<5	--	<5	--
Molybdenum	EG005T	5	mg/kg	----	4000	<5	--	<5	--	<5	--	<5	--	<5	--
Nickel	EG005T	5	mg/kg	----	12000	**157**	± 15	**133**	± 13	**164**	± 16	**158**	± 16	**139**	± 14
Selenium	EG005T	5	mg/kg	----	200	<5	--	<5	--	<5	--	<5	--	<5	--
Silver	EG005T	2	mg/kg	----	720	<2	--	<2	--	<2	--	<2	--	<2	--
Zinc	EG005T	5	mg/kg	----	140000	**102**	± 11	**86**	± 10	**110**	± 12	**98**	± 11	**91**	± 10
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	300	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5	--	<5	--	<5	--	<5	--	<5	--
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	40000	**240**	± 40	**290**	± 50	**180**	± 40	**220**	± 40	**220**	± 40
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5	--	<0.5	--	<0.5	--	<0.5	--	**1.2**	± 0.2
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**

			Sample ID	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
			Sampling date/time			01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*			**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20	--	<20	--	<20	--	<20	--	<20	--
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05	--	<0.05	--	<0.05	--	<0.05	--	<0.05	--
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	<0.05	--	<0.05	--
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10	--	<0.10	--	<0.10	--	<0.10	--	<0.10	--
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03	--	<0.03	--	<0.03	--	<0.03	--	<0.03	--
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20	--	<20	--	<20	--	<20	--	<20	--
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50	--	<50	--	<50	--	<50	--	<50	--

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**					*Sample ID*	**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
					Sampling date/time	01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**8.1**	± 0.1	**8.0**	± 0.1	**7.8**	± 0.1	**7.9**	± 0.1	**8.5**	± 0.1
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	500	**25**	± 4	**23**	± 3	**16**	± 3	**21**	± 3	**29**	± 4
Cadmium	EG005T	1	mg/kg	----	100	<1	--	<1	--	**1**	± 0.2	<1	--	**1**	± 0.2
Copper	EG005T	5	mg/kg	----	5000	**57**	± 7	**54**	± 7	**67**	± 8	**64**	± 8	**56**	± 7
Lead	EG005T	5	mg/kg	----	1500	<5	--	<5	--	<5	--	<5	--	<5	--
Molybdenum	EG005T	5	mg/kg	----	1000	<5	--	<5	--	<5	--	<5	--	<5	--
Nickel	EG005T	5	mg/kg	----	3000	**157**	± 15	**133**	± 13	**164**	± 16	**158**	± 16	**139**	± 14
Selenium	EG005T	5	mg/kg	----	50	<5	--	<5	--	<5	--	<5	--	<5	--
Silver	EG005T	2	mg/kg	----	180	<2	--	<2	--	<2	--	<2	--	<2	--
Tin	EG005T	10	mg/kg	----	500	<10	--	<10	--	<10	--	<10	--	<10	--
Zinc	EG005T	5	mg/kg	----	35000	**102**	± 11	**86**	± 10	**110**	± 12	**98**	± 11	**91**	± 10
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	75	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5	--	<5	--	<5	--	<5	--	<5	--
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	10000	**240**	± 40	**290**	± 50	**180**	± 40	**220**	± 40	**220**	± 40
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5	--	<0.5	--	<0.5	--	<0.5	--	**1.2**	± 0.2
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
			Sampling date/time			01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*			**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20	--	<20	--	<20	--	<20	--	<20	--
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	--	<0.05	--	<0.05	--	<0.05	--	<0.05	--
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	<0.05	--	<0.05	--
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	--	<0.10	--	<0.10	--	<0.10	--	<0.10	--
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	--	<0.03	--	<0.03	--	<0.03	--	<0.03	--
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	--	<20	--	<20	--	<20	--	<20	--
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	--	<50	--	<50	--	<50	--	<50	--

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
			Sampling date/time			01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**8.1**	± 0.1	**8.0**	± 0.1	**7.8**	± 0.1	**7.9**	± 0.1	**8.5**	± 0.1
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	20	**25**	± 4	**23**	± 3	**16**	± 3	**21**	± 3	**29**	± 4
Cadmium	EG005T	1	mg/kg	----	3	<1	--	<1	--	**1**	± 0.2	<1	--	**1**	± 0.2
Copper	EG005T	5	mg/kg	----	100	**57**	± 7	**54**	± 7	**67**	± 8	**64**	± 8	**56**	± 7
Lead	EG005T	5	mg/kg	----	300	<5	--	<5	--	<5	--	<5	--	<5	--
Molybdenum	EG005T	5	mg/kg	----	40	<5	--	<5	--	<5	--	<5	--	<5	--
Nickel	EG005T	5	mg/kg	----	60	**157**	± 15	**133**	± 13	**164**	± 16	**158**	± 16	**139**	± 14
Selenium	EG005T	5	mg/kg	----	10	<5	--	<5	--	<5	--	<5	--	<5	--
Silver	EG005T	2	mg/kg	----	10	<2	--	<2	--	<2	--	<2	--	<2	--
Tin	EG005T	10	mg/kg	----	50	<10	--	<10	--	<10	--	<10	--	<10	--
Zinc	EG005T	5	mg/kg	----	200	**102**	± 11	**86**	± 10	**110**	± 12	**98**	± 11	**91**	± 10
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	1	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	50	<5	--	<5	--	<5	--	<5	--	<5	--
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	450	**240**	± 40	**290**	± 50	**180**	± 40	**220**	± 40	**220**	± 40
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5	--	<0.5	--	<0.5	--	<0.5	--	**1.2**	± 0.2
EP074I: Volatile Halogenated Compounds															
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--
EP075A: Phenolic Compounds (Non-halogenated)															

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**		**SX_OB_20220301_12_04_SS_Primary_ALS**		**SX_OB_20220301_16_31_SS_Triplicate_ALS**		**SX_OB_20220301_16_28_SS_Primary_ALS**	
			Sampling date/time			01-Mar-2022 08:53		01-Mar-2022 08:53		01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-001**	MU	**EM2203621-002**	MU	**EM2203621-003**	MU	**EM2203621-004**	MU	**EM2203621-005**	MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20	--	<20	--	<20	--	<20	--	<20	--
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
EP075I: Organochlorine Pesticides															
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	--	<0.10	--	<0.10	--	<0.10	--	<0.10	--
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20	--	<20	--	<20	--	<20	--	<20	--
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50	--	<50	--	<50	--	<50	--	<50	--

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**

Sample ID						**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
Sampling date/time						02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	**7.8**	± 0.1	**8.4**	± 0.1	**8.1**	± 0.1	----		----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	2000	**19**	± 3	**26**	± 4	**26**	± 4	----		----	
Cadmium	EG005T	1	mg/kg	----	400	**1**	± 0.2	**1**	± 0.2	<5	--	----		----	
Copper	EG005T	5	mg/kg	----	20000	**70**	± 8	**50**	± 6	**66**	± 8	----		----	
Lead	EG005T	5	mg/kg	----	6000	<5	--	<5	--	<5	--	----		----	
Molybdenum	EG005T	5	mg/kg	----	4000	<5	--	<5	--	<5	--	----		----	
Nickel	EG005T	5	mg/kg	----	12000	**163**	± 16	**128**	± 12	**172**	± 17	----		----	
Selenium	EG005T	5	mg/kg	----	200	<5	--	<5	--	<5	--	----		----	
Silver	EG005T	2	mg/kg	----	720	<2	--	<2	--	<2	--	----		----	
Zinc	EG005T	5	mg/kg	----	140000	**106**	± 12	**84**	± 9	**99**	± 11	----		----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	300	<0.1	--	<0.1	--	<0.1	--	----		----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0	--	<1.0	--	<1.0	--	----		----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5	--	<5	--	<5	--	----		----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	40000	**230**	± 40	**200**	± 40	**230**	± 40	----		----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2	--	<0.2	--	<0.2	--	----		----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5	--	<0.5	--	<0.5	--	----		----	
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50	--	<0.50	--	<0.50	--	----		----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50	--	<0.50	--	<0.50	--	----		----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50	--	<0.50	--	<0.50	--	----		----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00	--	<1.00	--	<1.00	--	----		----	
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20	--	<20	--	<20	--	----		----	
EP075B: Polynuclear Aromatic Hydrocarbons															

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			Sample ID	Guideline	Guideline	**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
			Sampling date/time			02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	Method	LOR	Unit	Lower Limit	Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EP075B: Polynuclear Aromatic Hydrocarbons - Continued															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	----		----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5	--	<0.5	--	<0.5	--	----		----	
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05	--	<0.05	--	<0.05	--	----		----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30	--	<0.30	--	<0.30	--	----		----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	----		----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10	--	<0.10	--	<0.10	--	----		----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03	--	<0.03	--	<0.03	--	----		----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20	--	<20	--	<20	--	----		----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50	--	<50	--	<50	--	----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
			Sampling date/time			02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**7.8**	± 0.1	**8.4**	± 0.1	**8.1**	± 0.1	----		----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	500	**19**	± 3	**26**	± 4	**26**	± 4	----		----	
Cadmium	EG005T	1	mg/kg	----	100	**1**	± 0.2	**1**	± 0.2	<5	--	----		----	
Copper	EG005T	5	mg/kg	----	5000	**70**	± 8	**50**	± 6	**66**	± 8	----		----	
Lead	EG005T	5	mg/kg	----	1500	<5	--	<5	--	<5	--	----		----	
Molybdenum	EG005T	5	mg/kg	----	1000	<5	--	<5	--	<5	--	----		----	
Nickel	EG005T	5	mg/kg	----	3000	**163**	± 16	**128**	± 12	**172**	± 17	----		----	
Selenium	EG005T	5	mg/kg	----	50	<5	--	<5	--	<5	--	----		----	
Silver	EG005T	2	mg/kg	----	180	<2	--	<2	--	<2	--	----		----	
Tin	EG005T	10	mg/kg	----	500	<10	--	<10	--	<10	--	----		----	
Zinc	EG005T	5	mg/kg	----	35000	**106**	± 12	**84**	± 9	**99**	± 11	----		----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	75	<0.1	--	<0.1	--	<0.1	--	----		----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0	--	<1.0	--	<1.0	--	----		----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5	--	<5	--	<5	--	----		----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	10000	**230**	± 40	**200**	± 40	**230**	± 40	----		----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2	--	<0.2	--	<0.2	--	----		----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5	--	<0.5	--	<0.5	--	----		----	
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50	--	<0.50	--	<0.50	--	----		----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50	--	<0.50	--	<0.50	--	----		----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50	--	<0.50	--	<0.50	--	----		----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00	--	<1.00	--	<1.00	--	----		----	
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20	--	<20	--	<20	--	----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
			Sampling date/time			02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	--	<0.5	--	<0.5	--	----		----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	--	<0.5	--	<0.5	--	----		----	
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	--	<0.05	--	<0.05	--	----		----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	--	<0.30	--	<0.30	--	----		----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	----		----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	--	<0.10	--	<0.10	--	----		----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	--	<0.03	--	<0.03	--	----		----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	--	<20	--	<20	--	----		----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	--	<50	--	<50	--	----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
			Sampling date/time			02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**7.8**	± 0.1	**8.4**	± 0.1	**8.1**	± 0.1	----		----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	20	**19**	± 3	**26**	± 4	**26**	± 4	----		----	
Cadmium	EG005T	1	mg/kg	----	3	**1**	± 0.2	**1**	± 0.2	<5	--	----		----	
Copper	EG005T	5	mg/kg	----	100	**70**	± 8	**50**	± 6	**66**	± 8	----		----	
Lead	EG005T	5	mg/kg	----	300	<5	--	<5	--	<5	--	----		----	
Molybdenum	EG005T	5	mg/kg	----	40	<5	--	<5	--	<5	--	----		----	
Nickel	EG005T	5	mg/kg	----	60	**163**	± 16	**128**	± 12	**172**	± 17	----		----	
Selenium	EG005T	5	mg/kg	----	10	<5	--	<5	--	<5	--	----		----	
Silver	EG005T	2	mg/kg	----	10	<2	--	<2	--	<2	--	----		----	
Tin	EG005T	10	mg/kg	----	50	<10	--	<10	--	<10	--	----		----	
Zinc	EG005T	5	mg/kg	----	200	**106**	± 12	**84**	± 9	**99**	± 11	----		----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	1	<0.1	--	<0.1	--	<0.1	--	----		----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0	--	<1.0	--	<1.0	--	----		----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	50	<5	--	<5	--	<5	--	----		----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	450	**230**	± 40	**200**	± 40	**230**	± 40	----		----	
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1	--	<0.1	--	<0.1	--	----		----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2	--	<0.2	--	<0.2	--	----		----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5	--	<0.5	--	<0.5	--	----		----	
EP074I: Volatile Halogenated Compounds															
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50	--	<0.50	--	<0.50	--	----		----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00	--	<1.00	--	<1.00	--	----		----	
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20	--	<20	--	<20	--	----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	**SX_OB_20220301_20_10_SS_Primary_ALS**		**SX_OB_20220302_00_01_SS_Primary_ALS**		**SX_OB_20220302_04_06_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Primary_ALS**		**SX_OB_20220301_08_53_SS_Duplicate_ALS**	
			Sampling date/time			02-Mar-2022 20:10		02-Mar-2022 00:01		02-Mar-2022 04:06		01-Mar-2022 08:53		01-Mar-2022 08:53	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-006**	MU	**EM2203621-007**	MU	**EM2203621-008**	MU	**EM2203621-009**	MU	**EM2203621-010**	MU
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5	--	<0.5	--	<0.5	--	----		----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	----		----	
EP075I: Organochlorine Pesticides															
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	--	<0.10	--	<0.10	--	----		----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20	--	<20	--	<20	--	----		----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50	--	<50	--	<50	--	----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**
			Sampling date/time			01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	*Method*	*LOR*	*Unit*			**EM2203621-011** MU	**EM2203621-012** MU	**EM2203621-013** MU	**EM2203621-014** MU	**EM2203621-015** MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**

			Sample ID	Guideline	Guideline	**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**
			Sampling date/time			01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-011** MU	**EM2203621-012** MU	**EM2203621-013** MU	**EM2203621-014** MU	**EM2203621-015** MU
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**
			Sampling date/time			01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-011** MU	**EM2203621-012** MU	**EM2203621-013** MU	**EM2203621-014** MU	**EM2203621-015** MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**
			Sampling date/time	Guideline	Guideline	01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-011** MU	**EM2203621-012** MU	**EM2203621-013** MU	**EM2203621-014** MU	**EM2203621-015** MU
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID			SX_OB_20220301_12_04_SS_Primary_ALS		SX_OB_20220301_16_31_SS_Triplicate_ALS		SX_OB_20220301_16_28_SS_Primary_ALS		SX_OB_20220301_20_10_SS_Primary_ALS		SX_OB_20220302_00_01_SS_Primary_ALS	
			Sampling date/time	Guideline	Guideline	01-Mar-2022 12:04		01-Mar-2022 16:31		01-Mar-2022 16:28		02-Mar-2022 20:10		02-Mar-2022 12:01	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-011**	MU	**EM2203621-012**	MU	**EM2203621-013**	MU	**EM2203621-014**	MU	**EM2203621-015**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----		----		----		----		----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Cadmium	EG005T	1	mg/kg	----	----	----		----		----		----		----	
Copper	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Lead	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Molybdenum	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Nickel	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Selenium	EG005T	5	mg/kg	----	----	----		----		----		----		----	
Silver	EG005T	2	mg/kg	----	----	----		----		----		----		----	
Tin	EG005T	10	mg/kg	----	----	----		----		----		----		----	
Zinc	EG005T	5	mg/kg	----	----	----		----		----		----		----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	----	----		----		----		----		----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----		----		----		----		----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	----	----		----		----		----		----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	----	----		----		----		----		----	
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----		----		----		----		----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	----	----		----		----		----		----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----		----		----		----		----	
EP074I: Volatile Halogenated Compounds															
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----		----		----		----		----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----		----		----		----		----	
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----		----		----		----		----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

Sample ID						**SX_OB_20220301_12_04_SS_Primary_ALS**	**SX_OB_20220301_16_31_SS_Triplicate_ALS**	**SX_OB_20220301_16_28_SS_Primary_ALS**	**SX_OB_20220301_20_10_SS_Primary_ALS**	**SX_OB_20220302_00_01_SS_Primary_ALS**
Sampling date/time						01-Mar-2022 12:04	01-Mar-2022 16:31	01-Mar-2022 16:28	02-Mar-2022 20:10	02-Mar-2022 12:01
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203621-011** MU	**EM2203621-012** MU	**EM2203621-013** MU	**EM2203621-014** MU	**EM2203621-015** MU
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220302_04_06_SS_Primary_ALS**	----	----	----	----
			Sampling date/time	Guideline	Guideline	02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-016** MU				
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**	**----**	**----**
			Sampling date/time	Guideline Lower Limit	Guideline Upper Limit	02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*			**EM2203621-016** MU				
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**	**----**	**----**
			Sampling date/time	Guideline	Guideline	02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-016** MU				
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**	**----**	**----**
			Sampling date/time	Guideline	Guideline	02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-016** MU				
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220302_04_06_SS_Primary_ALS**	----	----	----	----
			Sampling date/time	Guideline	Guideline	02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-016** MU				
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID	Guideline	Guideline	**SX_OB_20220302_04_06_SS_Primary_ALS**	**----**	**----**	**----**	**----**
			Sampling date/time			02-Mar-2022 04:06	----	----	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203621-016** MU				
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

QUALITY CONTROL REPORT

Work Order	: **EM2203621**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 02-Mar-2022
Order number	: ----	Date Analysis Commenced	: 04-Mar-2022
C-O-C number	: 20220302050132-ALS-21	Issue Date	: 09-Mar-2022
Sampler	: Louis - EP Risk, Luke		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

NATA

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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4210545)									
EM2203590-023	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	88	105	18.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	115	117	1.8	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	30	30	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	68	66	1.9	0% - 50%
EM2203605-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	100	99	0.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	65	59	9.8	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	18	18	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	10	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	32	33	0.0	No Limit
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4213231)									
EM2203273-001	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.3	8.3	0.0	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 (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4213231) - continued									
EM2203517-028	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	5.1	5.1	0.0	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4213232)									
EM2203621-006	SX_OB_20220301_20_10_ SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.9	0.0	0% - 20%
EM2203684-008	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4210528)									
EM2203621-001	SX_OB_20220301_08_53_ SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	32.4	32.0	1.4	0% - 20%
EM2203750-007	Anonymous	EA055: Moisture Content	----	0.1	%	9.3	8.9	4.4	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4210544)									
EM2203590-023	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203605-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4211219)									
EM2203517-010	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2203597-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4211220)									
EM2203621-003	SX_OB_20220301_12_04_ SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203702-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4211645)									
EM2203605-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2203598-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	1	1	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4211648)									
EM2203621-008	SX_OB_20220302_04_06_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2203725-008	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4211224)									
EM2203541-002	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	450	290	43.0	0% - 50%
EM2203597-010	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	170	150	13.6	No Limit
EK040T: Fluoride Total (QC Lot: 4211225)									
EM2203621-006	SX_OB_20220301_20_10_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	230	260	11.3	No Limit
EM2203713-017	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	230	250	10.6	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4210466)									
EM2203100-007	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4208238)									

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 (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4208238) - continued									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4208238)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4208238)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4210465)									
EM2203100-007	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	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 (%)*
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4210465) - continued									
EM2203100-007	Anonymous	EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4210465)									
EM2203100-007	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<20	<20	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4210465)									
EM2203100-007	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
				Laboratory Duplicate (DUP) Report					
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4210465) - continued									
EM2203100-007	Anonymous	EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4210465)									
EM2203100-007	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4210465) - continued									
EM2203100-007	Anonymous	EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4208238)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4210467)									
EM2203100-007	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	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 (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4210467) - continued									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4208238)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4210467)									
EM2203100-007	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4208435)									
EM2203514-001	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	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4208435)									
EM2203514-001	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	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

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: 4208435) - continued									
EM2203514-001	Anonymous	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4208435)									
EM2203514-001	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
EM2203621-001	SX_OB_20220301_08_53_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	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: 4208435) - continued									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4208435)									
EM2203514-001	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
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4208435)									
EM2203514-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	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: 4214663)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	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

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: 4214663) - continued									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	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: 4214761)									
EM2203621-009	SX_OB_20220301_08_53_SS_Primary_ALS	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
EM2203634-003	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4214663)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	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: 4214761)									
EM2203621-009	SX_OB_20220301_08_53_SS_Primary_ALS	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

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: 4214761) - continued									
EM2203621-009	SX_OB_20220301_08_53_ SS_Primary_ALS	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
EM2203634-003	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (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: 4214663)									
EM2203621-001	SX_OB_20220301_08_53_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4214761)									
EM2203621-009	SX_OB_20220301_08_53_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
				Laboratory Duplicate (DUP) Report					
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4214761) - continued									
EM2203621-009	SX_OB_20220301_08_53_SS_Primary_ALS	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
EM2203634-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4214663)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	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: 4214761)									
EM2203621-009	SX_OB_20220301_08_53_SS_Primary_ALS	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
EM2203634-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
				Laboratory Duplicate (DUP) Report					
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4214761) - continued									
EM2203634-003	Anonymous	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4214663)									
EM2203621-001	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4214761)									
EM2203621-009	SX_OB_20220301_08_53_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2203634-003	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	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*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4210545)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	108	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	83.0	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	110	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	105	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	96.5	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	84.1	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	104	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	84.9	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	106	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	79.5	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4212943)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4213231)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	100 101	98.8 99.3	101 101
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4213232)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	100 101	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4210544)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	87.5	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211219)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	80.1	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211220)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	81.5	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211645)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	84.2	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211648)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	82.9	70.0	130
EK040T: Fluoride Total (QCLot: 4211224)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	89.4	75.2	110
EK040T: Fluoride Total (QCLot: 4211225)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	90.9	75.2	110

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
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4210466)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	119	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208238)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	97.3	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	99.1	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	100	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	97.9	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	98.3	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	97.1	68.4	110
EP074H: Naphthalene (QCLot: 4208238)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	100	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4208238)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	95.0	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	103	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	97.7	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	99.0	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	98.0	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	98.3	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	99.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	106	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	97.8	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	99.4	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	92.7	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	100	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	102	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	99.5	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	100.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	96.0	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	100	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	96.5	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	100	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4210465)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	87.2	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	83.5	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	83.6	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	84.2	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	97.4	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	96.7	72.4	128

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
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4210465) - continued								
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	99.5	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	4 mg/kg	99.2	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	94.8	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4210465)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	88.2	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	88.0	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	88.0	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	82.8	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	84.4	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	64.0	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	95.7	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	94.4	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	82.6	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	69.4	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4210465)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	84.1	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	97.9	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	97.6	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	98.3	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	89.2	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	89.3	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	89.6	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	90.2	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	90.2	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	91.6	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	91.3	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	90.3	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	91.2	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	91.2	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	91.6	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4210465)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	89.1	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	88.3	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	90.2	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	89.8	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	90.8	76.5	134

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*
EP075I: Organochlorine Pesticides (QCLot: 4210465) - continued								
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	88.0	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	88.3	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	88.1	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	88.4	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	89.0	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	90.3	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	89.5	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	88.8	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	106	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	72.1	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	91.1	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	89.4	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	90.1	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	89.5	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	90.1	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208238)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	101	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4210467)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	91.8	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	99.8	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	97.1	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	97.8	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208238)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	106	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4210467)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	110	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	97.7	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	89.6	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	99.6	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4208435)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	95.9	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	86.8	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	68.8	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	89.4	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	95.4	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	97.5	59.0	134

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*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4208435)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	97.5	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.9	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.6	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.8	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	95.2	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4208435)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.3	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.0	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.5	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	111	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4208435)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	101	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	102	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	111	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	119	70.0	130
EP231P: PFAS Sums (QCLot: 4208435)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

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: 4214663)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	94.9	72.0	130

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: 4214663) - continued								
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	92.3	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	98.4	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	95.9	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	78.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4214761)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	96.4	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	104	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	104	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	91.5	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	101	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	91.2	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214663)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	91.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	95.8	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	94.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	102	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	105	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214761)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	108	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	104	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	104	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	101	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	110	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.9	67.0	137

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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663) - continued								
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	115	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	124	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	102	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	107	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214761)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	104	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	138	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	115	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	107	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214663)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 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	0.238 µg/L	104	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	108	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	88.2	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214761)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	105	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	123	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	121	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	101	70.0	130
EP231P: PFAS Sums (QCLot: 4214663)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4214761)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----

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
EP231P: PFAS Sums (QCLot: 4214761) - continued								
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
				Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4210545)							
EM2203590-024	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	104	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.2	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	101	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	109	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	94.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	93.1	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	86.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4210544)							
EM2203590-024	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	113	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211219)							
EM2203517-019	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 30.8	58.0	114
EM2203517-019	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 55.1	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211220)							
EM2203621-004	SX_OB_20220301_16_31_SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	75.9	58.0	114
EM2203621-004	SX_OB_20220301_16_31_SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	93.5	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211645)							
EM2203597-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	91.9	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211648)							
EM2203634-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	93.6	70.0	130
EK040T: Fluoride Total (QCLot: 4211224)							
EM2203541-003	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	115	70.0	130
EK040T: Fluoride Total (QCLot: 4211225)							
EM2203621-007	SX_OB_20220302_00_01_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	78.6	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4210466)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	*SpikeRecovery(%)*	*Acceptable Limits (%)*	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4210466) - continued							
EM2203501-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	110	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208238)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	103	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	105	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4208238)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	101	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	102	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	97.6	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4210465)							
EM2203100-008	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	98.8	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	94.2	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	75.3	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4210465)							
EM2203100-008	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	98.7	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	90.0	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4210465)							
EM2203100-008	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	105	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	98.3	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208238)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	89.2	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4210467)							
EM2203501-002	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	91.3	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	98.2	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	95.7	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	96.7	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208238)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	88.7	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4210467)							
EM2203501-002	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	109	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	96.1	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	89.7	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	98.4	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	93.9	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	87.1	73.0	123

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: 4208435) - continued							
EM2203514-002	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	97.6	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	99.3	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	107	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	99.4	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	97.6	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.6	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	98.1	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	98.7	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	93.9	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	96.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	82.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	94.1	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	96.7	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	94.9	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	92.0	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	94.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	107	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	94.3	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	96.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	99.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	102	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	93.0	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	101	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	98.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	101	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	84.1	70.0	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: 4214663)							

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: 4214663) - continued							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	111	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.6	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	104	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	101	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	88.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4214761)							
EM2203621-010	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	103	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	99.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	92.3	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	93.9	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	# 41.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214663)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	100	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	100	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	96.6	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	101	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	104	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	101	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	105	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	119	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	94.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	105	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214761)							
EM2203621-010	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	107	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	107	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	110	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	106	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	104	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	104	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	79.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	# 68.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	# 26.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 34.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663)							

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: 4214663) - continued							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	131	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	120	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	105	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	110	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	98.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214761)							
EM2203621-010	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	99.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	99.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	91.0	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	80.2	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	86.3	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	82.3	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214663)							
EM2203621-002	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	102	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	108	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	114	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214761)							
EM2203621-010	SX_OB_20220301_08_53_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	99.3	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 37.8	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203621**	Page	: 1 of 14
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 02-Mar-2022
Site	: ----	Issue Date	: 09-Mar-2022
Sampler	: Louis - EP Risk, Luke	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

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, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	**Analyte**	CAS Number	Data	Limits	**Comment**
Matrix Spike (MS) Recoveries							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203517--019	Anonymous	**Hexavalent Chromium**	18540-29-9	30.8 %	58.0-114%	**Recovery less than lower data quality objective**
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203517--019	Anonymous	**Hexavalent Chromium**	18540-29-9	55.1 %	58.0-114%	**Recovery less than lower data quality objective**

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	EM2203621--010	SX_OB_20220301_08_53_SS	**Perfluorodecane sulfonic acid (PFDS)**	335-77-3	41.7 %	53.0-142%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	SX_OB_20220301_08_53_SS	**Perfluorododecanoic acid (PFDoDA)**	307-55-1	68.8 %	72.0-134%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	SX_OB_20220301_08_53_SS	**Perfluorotridecanoic acid (PFTrDA)**	72629-94-8	26.0 %	65.0-144%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	SX_OB_20220301_08_53_SS	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	34.1 %	71.0-132%	**Recovery less than lower data quality objective**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2203621--010	SX_OB_20220301_08_53_SS	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	37.8 %	70.0-130%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**08-Mar-2022**	08-Mar-2022	✓	**08-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	09-Mar-2022	✓	**08-Mar-2022**	08-Mar-2022	✓

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)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**----**	----	----	**05-Mar-2022**	15-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**----**	----	----	**05-Mar-2022**	16-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**08-Mar-2022**	28-Aug-2022	✓	**08-Mar-2022**	28-Aug-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	29-Aug-2022	✓	**08-Mar-2022**	29-Aug-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**08-Mar-2022**	29-Mar-2022	✓	**08-Mar-2022**	29-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	30-Mar-2022	✓	**08-Mar-2022**	30-Mar-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	29-Mar-2022	✓	**08-Mar-2022**	14-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	30-Mar-2022	✓	**08-Mar-2022**	14-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	21-Mar-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	21-Mar-2022	✓

Matrix: **SOIL**

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

Method ***Container*** */ Client Sample ID(s)*	***Sample Date***	*Extraction / Preparation* ***Date extracted***	 *Due for extraction*	 *Evaluation*	*Analysis* ***Date analysed***	 *Due for analysis*	 *Evaluation*
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	29-Mar-2022	✓	**09-Mar-2022**	29-Mar-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	30-Mar-2022	✓	**09-Mar-2022**	30-Mar-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	28-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	28-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	08-Mar-2022	✓	**05-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓

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*
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	08-Mar-2022	✓	**05-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	08-Mar-2022	✓	**05-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓

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*
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	08-Mar-2022	✓	**05-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	08-Mar-2022	✓	**05-Mar-2022**	08-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**07-Mar-2022**	15-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	16-Apr-2022	✓

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

Method	*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)		*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	28-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	28-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	28-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	28-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS	**01-Mar-2022**	**04-Mar-2022**	28-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓

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

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) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Primary_ALS, SX_OB_20220301_08_53_SS_Duplicate_ALS, SX_OB_20220301_12_04_SS_Primary_ALS, SX_OB_20220301_16_31_SS_Triplicate_ALS, SX_OB_20220301_16_28_SS_Primary_ALS, SX_OB_20220301_20_10_SS_Primary_ALS, SX_OB_20220302_00_01_SS_Primary_ALS, SX_OB_20220302_04_06_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓

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)								
SX_OB_20220301_08_53_SS_Primary_ALS,	SX_OB_20220301_08_53_SS_Duplicate_ALS,	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
SX_OB_20220301_12_04_SS_Primary_ALS,	SX_OB_20220301_16_31_SS_Triplicate_ALS,							
SX_OB_20220301_16_28_SS_Primary_ALS,	SX_OB_20220301_20_10_SS_Primary_ALS,							
SX_OB_20220302_00_01_SS_Primary_ALS,	SX_OB_20220302_04_06_SS_Primary_ALS,							
SX_OB_20220301_08_53_SS_Primary_ALS,	SX_OB_20220301_08_53_SS_Duplicate_ALS,							
SX_OB_20220301_12_04_SS_Primary_ALS,	SX_OB_20220301_16_31_SS_Triplicate_ALS,							
SX_OB_20220301_16_28_SS_Primary_ALS,	SX_OB_20220301_20_10_SS_Primary_ALS,							
SX_OB_20220302_00_01_SS_Primary_ALS,	SX_OB_20220302_04_06_SS_Primary_ALS							

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	4	31	**12.90**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

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*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	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	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	*Method*	*Matrix*	*Method Descriptions*
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. 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 and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220302050132-ALS-21[redacted]
P.O. NO.:
RESULTS REQUIRED (Date)[redacted] 5 DAY
QUOTE NO.: ME-150-19 WGTP

SAMPLER: Luke, Louis - EP Risk
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhubabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (if applicable)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
9 1	SX_OB_20220301_08_53_SS_Primary_ALS	S	1/03/2022	8:53:00 AM	Bucket	1	x	x	x	x	x
10 2	SX_OB_20220301_08_53_SS_Duplicate_ALS	S	1/03/2022	8:53:00 AM	Bucket	1	x	x	x	x	x
11 3	SX_OB_20220301_12_04_SS_Primary_ALS	S	1/03/2022	12:04:00 PM	Bucket	1	x	x	x	x	x
12 4	SX_OB_20220301_16_31_SS_Triplicate_ALS	S	1/03/2022	4:31:00 PM	Bucket	1	x	x	x	x	x
13 5	SX_OB_20220301_16_28_SS_Primary_ALS	S	1/03/2022	4:28:00 PM	Bucket	1	x	x	x	x	x
14 6	SX_OB_20220301_20_10_SS_Primary_ALS	S	2/03/2022	8:10:00 PM	Bucket	1	x	x	x	x	x
15 7	SX_OB_20220302_00_01_SS_Primary_ALS	S	2/03/2022	12:01:00 AM	Bucket	1	x	x	x	x	x
16 8	SX_OB_20220302_04_06_SS_Primary_ALS	S	2/03/2022	4:06:00 AM	Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203621
Telephone : - 61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Emma Strong	Date: 02/03/2022	Name:	Date: 2/3	Con' Note No:
Of: Agon Environmental	Time: 09:52am	Of: An	Time: 12:00	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved;
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page 1 of 1

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order : **EM2203634**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : CRAIG TRIMBUR
Address : D1.1 63-85 TURNER STREET
PORT MELBOURNE 3207
Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220302094207-ALS-6
Sampler : David Lawson - AGON
Site : ----
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 4
No. of samples analysed : 4

Page : 1 of 12
Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +6138549 9600
Date Samples Received : 02-Mar-2022 12:40
Date Analysis Commenced : 04-Mar-2022
Issue Date : 09-Mar-2022 17:59

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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EG005T: EM2203634 #2 has been diluted prior to cadmium analysis due to sample matrix. LOR values have been raised accordingly.
- EP231X: Poor matrix spike recovery for sample EM2203621-010 due to sample matrix interference.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				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	<0.01	<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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

			Sample ID	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**97.7**	**86.4**	**86.4**	**100**	----
13C8-PFOA	----	0.02	%	**109**	**108**	**104**	**107**	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**7.8**	**7.8**	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**30.4**	**30.4**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**23**	**19**	----	----	----
Cadmium	7440-43-9	1	mg/kg	**1**	<5	----	----	----
Chromium	7440-47-3	5	mg/kg	**114**	**92**	----	----	----
Copper	7440-50-8	5	mg/kg	**68**	**63**	----	----	----
Lead	7439-92-1	5	mg/kg	**5**	<5	----	----	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	----	----	----
Nickel	7440-02-0	5	mg/kg	**173**	**168**	----	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	----	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	----	----	----
Tin	7440-31-5	10	mg/kg	<10	<10	----	----	----
Zinc	7440-66-6	5	mg/kg	**105**	**96**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	----	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	----	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	**210**	**250**	----	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.3**	**9.3**	----	----	----
After HCl pH	----	0.1	pH Unit	**1.5**	**1.5**	----	----	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	----	----	----
Final pH	----	0.1	pH Unit	**5.0**	**5.1**	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	**9.6**	**9.5**	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	----	----	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	----	----	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	----	----	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	----	----	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	----	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	----	----	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	----	----	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	----	----	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	----	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	----	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	----	----	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	----	----	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	----	----	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	----	----	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	----	----	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	----	----	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	----	----	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	----	----	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	----	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	----	----	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	----	----	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	----	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	----	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	----	----	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg	<1.00	<1.00	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	----	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	----	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	----	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	----	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	----	----	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	----	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	----	----	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg	<20	<20	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	----	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	----	----	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg	<0.10	<0.10	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	----	----	----
^ **Chlordane**	57-74-9	0.10	mg/kg	<0.10	<0.10	----	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**----**
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	**--------**
				Result	Result	Result	Result	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	**SX_OB_20220302_08_15_SS_Duplicate_ALS**	**SX_OB_20220302_08_15_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	02-Mar-2022 08:15	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203634-001**	**EM2203634-002**	**EM2203634-003**	**EM2203634-004**	--------
				Result	Result	Result	Result	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	----	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**108**	**103**	----	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**80.5**	**88.3**	----	----	----
Toluene-D8	2037-26-5	0.1	%	**77.5**	**87.1**	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	**82.5**	**92.1**	----	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**94.7**	**84.2**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**96.8**	**84.0**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**88.0**	**82.1**	----	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**95.6**	**84.0**	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**89.3**	**76.4**	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	**106**	**99.3**	----	----	----
Anthracene-d10	1719-06-8	0.025	%	**97.3**	**93.1**	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	**101**	**94.2**	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**110**	**94.6**	----	----	----
13C8-PFOA	----	0.0002	%	**109**	**109**	----	----	----

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

Automated Guideline Comparison Report

Work Order	: **EM2203634**	Page	: 1 of 2
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: ----	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: ----	Telephone	: +6138549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 02-Mar-2022 12:40
Order number	: ----	Date Analysed	: 04-Mar-2022
C-O-C number	: 20220302094207-ALS-6	Date Issued	: 09-Mar-2022 18:15
No. of samples received	: 4		
No. of samples analysed	: 4	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

General Comments

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

Summary of Thresholds Reached or Exceeded

Results for all samples detailed in this report are below the upper threshold limits for Fill Material.

Results for all samples detailed in this report are below the upper threshold limits for Fill Material.

Analytical Results

Sub-Matrix:			*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	----	----	----	----	----
			Sampling date/time			----	----	----	----	----
Compound	*Method*	*LOR*	*Unit*			MU	MU	MU	MU	MU
		-	-	----	----	----	----	----	----	----

QUALITY CONTROL REPORT

Work Order	: **EM2203634**	Page	: 1 of 25
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 02-Mar-2022
Order number	: ----	Date Analysis Commenced	: 04-Mar-2022
C-O-C number	: 20220302094207-ALS-6	Issue Date	: 09-Mar-2022
Sampler	: David Lawson - AGON		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4210545)									
EM2203590-023	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	88	105	18.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	115	117	1.8	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	30	30	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	68	66	1.9	0% - 50%
EM2203605-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	100	99	0.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	65	59	9.8	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	18	18	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	10	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	32	33	0.0	No Limit
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4213232)									
EM2203621-006	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.9	0.0	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 (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4213232) - continued									
EM2203684-008	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4210528)									
EM2203621-001	Anonymous	EA055: Moisture Content	----	0.1	%	32.4	32.0	1.4	0% - 20%
EM2203750-007	Anonymous	EA055: Moisture Content	----	0.1	%	9.3	8.9	4.4	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4210544)									
EM2203590-023	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203605-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4211220)									
EM2203621-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203702-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4211648)									
EM2203621-008	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2203725-008	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4211225)									
EM2203621-006	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	230	260	11.3	No Limit
EM2203713-017	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	230	250	10.6	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4210469)									
EM2203541-002	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203605-002	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4208238)									
EM2203621-001	Anonymous	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4208238)									
EM2203621-001	Anonymous	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4208238)									
EM2203621-001	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	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 (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4208238) - continued									
EM2203621-001	Anonymous	EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4210468)									
EM2203541-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203605-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4210468)									
EM2203541-002	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	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 (%)*
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4210468) - continued									
EM2203541-002	Anonymous	EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203605-002	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4210468)									
EM2203541-002	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203605-002	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
				Laboratory Duplicate (DUP) Report					
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4210468) - continued									
EM2203605-002	Anonymous	EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4210468)									
EM2203541-002	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203605-002	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4210468) - continued									
EM2203605-002	Anonymous	EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4208238)									
EM2203621-001	Anonymous	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4210470)									
EM2203541-002	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203605-002	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4208238)									
EM2203621-001	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4210470)									
EM2203541-002	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203605-002	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4208435)									
EM2203514-001	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	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203621-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	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: 4208435) - continued									
EM2203621-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4208435)									
EM2203514-001	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	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203621-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4208435)									
EM2203514-001	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

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: 4208435) - continued									
EM2203514-001	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2203621-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4208435)									
EM2203514-001	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
EM2203621-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4208435)									
EM2203514-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
EM2203621-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	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: 4214663)									
EM2203621-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<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: 4214761)									
EM2203621-009	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
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	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: 4214663)									
EM2203621-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4214761)									
EM2203621-009	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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
				Laboratory Duplicate (DUP) Report					
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4214761) - continued									
EM2203621-009	Anonymous	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
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	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: 4214663)									
EM2203621-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4214761)									
EM2203621-009	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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

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: 4214761) - continued									
EM2203621-009	Anonymous	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
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4214663)									
EM2203621-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4214761)									
EM2203621-009	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
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	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: 4214761) - continued									
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	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: 4214663)									
EM2203621-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4214761)									
EM2203621-009	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2203634-003	SX_OB_20220302_08_15_SS_Duplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	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
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4210545)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	108	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	83.0	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	110	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	105	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	96.5	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	84.1	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	104	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	84.9	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	106	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	79.5	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4212943)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4213232)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	100 101	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4210544)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	87.5	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211220)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	81.5	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211648)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	82.9	70.0	130
EK040T: Fluoride Total (QCLot: 4211225)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	90.9	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4210469)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	110	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208238)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	97.3	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	99.1	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	100	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	97.9	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	98.3	69.4	111

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
						Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208238) - continued								
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	97.1	68.4	110
EP074H: Naphthalene (QCLot: 4208238)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	100	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4208238)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	95.0	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	103	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	97.7	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	99.0	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	98.0	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	98.3	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	99.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	106	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	97.8	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	99.4	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	92.7	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	100	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	102	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	99.5	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	100.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	96.0	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	100	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	96.5	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	100	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4210468)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	105	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	86.2	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	86.0	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	88.4	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	100	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	96.4	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	94.1	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	97.1	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	85.0	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4210468)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	97.5	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	99.8	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	98.8	74.3	129

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
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4210468) - continued								
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	84.6	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	86.1	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	80.9	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	116	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	114	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	90.7	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	90.4	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4210468)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	90.9	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	102	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	102	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	104	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	96.0	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	96.3	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	96.4	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	96.9	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	99.1	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	99.9	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	100	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	99.0	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	98.8	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	99.3	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	99.7	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4210468)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	91.7	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	92.8	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	90.4	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	93.0	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	93.5	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	89.7	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	93.0	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	89.4	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	91.2	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	91.7	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	93.1	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	96.4	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	95.6	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	102	69.0	143

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
EP075I: Organochlorine Pesticides (QCLot: 4210468) - continued								
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	60.0	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	94.1	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	95.0	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	94.2	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	91.3	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	93.0	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208238)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	101	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4210470)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	88.5	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.6	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	91.2	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.8	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208238)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	106	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4210470)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	87.7	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	91.1	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	95.5	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	90.7	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4208435)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	95.9	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	86.8	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	68.8	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	89.4	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	95.4	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	97.5	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4208435)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	97.5	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.9	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.6	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	64.0	136

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*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4208435) - continued								
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.8	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	95.2	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4208435)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.3	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.0	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.5	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	111	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4208435)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	101	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	102	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	111	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	119	70.0	130
EP231P: PFAS Sums (QCLot: 4208435)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

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: 4214663)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	94.9	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	92.3	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	98.4	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	95.9	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	78.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4214761)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	96.4	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	104	71.0	127

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: 4214761) - continued								
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	104	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	91.5	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	101	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	91.2	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214663)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	91.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	95.8	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	94.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	102	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	105	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214761)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	108	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	104	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	104	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	101	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	110	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	115	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	124	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	102	65.0	136

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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	107	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214761)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	104	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	138	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	115	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	107	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214663)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 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	0.238 µg/L	104	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	108	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	88.2	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214761)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	105	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	123	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	121	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	101	70.0	130
EP231P: PFAS Sums (QCLot: 4214663)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4214761)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4210545)							
EM2203590-024	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	104	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.2	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	101	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	109	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	94.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	93.1	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	86.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4210544)							
EM2203590-024	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	113	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4211220)							
EM2203621-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	75.9	58.0	114
EM2203621-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	93.5	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4211648)							
EM2203634-001	SX_OB_20220302_08_15_SS_Duplicate_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	93.6	70.0	130
EK040T: Fluoride Total (QCLot: 4211225)							
EM2203621-007	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	78.6	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4210469)							
EM2203588-006	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	141	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208238)							
EM2203621-002	Anonymous	EP074-UT: Benzene	71-43-2	2 mg/kg	103	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	105	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4208238)							
EM2203621-002	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	101	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	102	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	97.6	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4210468)							
EM2203541-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	104	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	93.8	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	59.2	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4210468)							
EM2203541-003	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	96.7	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	88.3	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4210468)							
EM2203541-003	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	86.5	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	94.1	37.8	152

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208238)							
EM2203621-002	Anonymous	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	89.2	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4210470)							
EM2203590-003	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	92.3	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	91.5	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	93.0	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	91.8	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208238)							
EM2203621-002	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	88.7	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4210470)							
EM2203590-003	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	90.8	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	93.0	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	97.2	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	92.8	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	93.9	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	87.1	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	97.6	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	99.3	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	107	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	99.4	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	97.6	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.6	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	98.1	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	98.7	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	93.9	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	96.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	82.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	94.1	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	96.7	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	94.9	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	92.0	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	94.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	107	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	94.3	70.0	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: 4208435) - continued							
EM2203514-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	96.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	99.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	102	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	93.0	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4208435)							
EM2203514-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	101	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	98.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	101	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	84.1	70.0	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: 4214663)							
EM2203621-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	111	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.6	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	104	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	101	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	88.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4214761)							
EM2203621-010	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	103	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	99.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	92.3	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	93.9	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	# 41.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214663)							
EM2203621-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	100	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	100	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	96.6	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	101	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	104	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	101	71.0	129

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: 4214663) - continued							
EM2203621-002	Anonymous	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	105	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	119	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	94.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	105	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4214761)							
EM2203621-010	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	107	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	107	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	110	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	106	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	104	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	104	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	79.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	# 68.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	# 26.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 34.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214663)							
EM2203621-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	131	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	120	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	105	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	110	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	98.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214761)							
EM2203621-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	99.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	99.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	91.0	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	80.2	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4214761) - continued							
EM2203621-010	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	86.3	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	82.3	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214663)							
EM2203621-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	102	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	108	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	114	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4214761)							
EM2203621-010	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	99.3	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 37.8	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203634**	Page	: 1 of 10
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 02-Mar-2022
Site	: ----	Issue Date	: 09-Mar-2022
Sampler	: David Lawson - AGON	No. of samples received	: 4
Order number	: ----	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.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, 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	EM2203621--010	Anonymous	**Perfluorodecane sulfonic acid (PFDS)**	335-77-3	41.7 %	53.0-142%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	Anonymous	**Perfluorododecanoic acid (PFDoDA)**	307-55-1	68.8 %	72.0-134%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	Anonymous	**Perfluorotridecanoic acid (PFTrDA)**	72629-94-8	26.0 %	65.0-144%	**Recovery less than lower data quality objective**
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203621--010	Anonymous	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	34.1 %	71.0-132%	**Recovery less than lower data quality objective**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2203621--010	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	37.8 %	70.0-130%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	09-Mar-2022	✓	**08-Mar-2022**	08-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**----**	----	----	**05-Mar-2022**	16-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	29-Aug-2022	✓	**08-Mar-2022**	29-Aug-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	30-Mar-2022	✓	**08-Mar-2022**	30-Mar-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	30-Mar-2022	✓	**08-Mar-2022**	14-Mar-2022	✓

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*
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	21-Mar-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	30-Mar-2022	✓	**09-Mar-2022**	30-Mar-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓

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*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	09-Mar-2022	✓	**05-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	16-Mar-2022	✓	**07-Mar-2022**	16-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**02-Mar-2022**	**04-Mar-2022**	29-Aug-2022	✓	**07-Mar-2022**	13-Apr-2022	✓

Matrix: **WATER**

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

Method	*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)		*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS, SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS, SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS, SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS, SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓

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) SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS, SX_OB_20220302_08_15_SS_Duplicate_ALS, SX_OB_20220302_08_15_SS_Primary_ALS	**07-Mar-2022**	**08-Mar-2022**	03-Sep-2022	✓	**08-Mar-2022**	03-Sep-2022	✓

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

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*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	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	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	*Method*	*Matrix*	*Method Descriptions*
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. 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 and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220302094207-ALS-6
P.O. NO.:
RESULTS REQUIRED (Date): [redacted] 5 day ✓
QUOTE NO.: ME-150-19 WGTP

SAMPLER: David Lawson - AGON
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED Including SUITES (note - suite codes must be listed to attract suite prices)

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
3 1	SX_OB_20220302_08_15_SS_Duplicate_ALS	S	2/03/2022	8:15	Bucket	1	x	x	x	x	x
4 2	SX_OB_20220302_08_15_SS_Primary_ALS	S	2/03/2022	8:15	Bucket	1	x	x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203634
Telephone : + 61-3-8549 9600

RELINQUISHED BY:
Name: David Lawson Date: 02/03/22
Of: Agon Environmental Time: 9850
Name: Date:
Of: Time:

RECEIVED BY
Name: Date: 2/3
Of: Time: 12:00
Name: Date:
Of: Time:

METHOD OF SHIPMENT
Con' Note No:
Transport Co:

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page 1 of 1

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order : **EM2203659**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : DAVID LAWSON
Address : D1.1 63-85 TURNER STREET
PORT MELBOURNE 3207
Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220303090137-ALS-6
Sampler : Hannah Kennedy - EP Risk
Site :
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 4
No. of samples analysed : 4

Page : 1 of 14
Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +6138549 9600
Date Samples Received : 03-Mar-2022 14:45
Date Analysis Commenced : 04-Mar-2022
Issue Date : 10-Mar-2022 18:35

ilac-MRA NATA
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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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: Poor matrix spike recovery for sample EM2203610-010 due to sample matrix interference.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Duplicate_ALS	----	----	----
Sampling date / time				03-Mar-2022 08:07	03-Mar-2022 08:07	----	----	----
				EM2203659-001	EM2203659-002	--------	--------	--------
				Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----
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	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

			Sample ID	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	----	----	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	----	----	----
Compound	CAS Number	LOR	Unit	**EM2203659-001**	**EM2203659-002**	--------	--------	--------
				Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----
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)	----	0.01	µg/L	<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**101**	**91.7**	----	----	----
13C8-PFOA	----	0.02	%	**103**	**108**	----	----	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	----	----	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	----	----	----
Compound	CAS Number	LOR	Unit	**EM2203659-003**	**EM2203659-004**	--------	--------	--------
				Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----
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	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	----	----	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	----	----	----
Compound	CAS Number	LOR	Unit	**EM2203659-003**	**EM2203659-004**	--------	--------	--------
				Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----
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)	----	0.01	µg/L	<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**97.3**	**96.6**	----	----	----
13C8-PFOA	----	0.02	%	**108**	**107**	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203659-001**	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	--------
				Result	Result	Result	Result	----
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**8.3**	**7.8**	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**34.2**	**32.5**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**26**	**19**	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**91**	**87**	----	----	----
Copper	7440-50-8	5	mg/kg	**61**	**52**	----	----	----
Lead	7439-92-1	5	mg/kg	<5	<5	----	----	----
Molybdenum	7439-98-7	2	mg/kg	<2	<2	----	----	----
Nickel	7440-02-0	2	mg/kg	**135**	**112**	----	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	----	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	----	----	----
Tin	7440-31-5	5	mg/kg	<5	<5	----	----	----
Zinc	7440-66-6	5	mg/kg	**94**	**79**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	----	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	1	mg/kg	<1	<1	----	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	40	mg/kg	**230**	**220**	----	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.1**	**8.7**	----	----	----
After HCl pH	----	0.1	pH Unit	**1.5**	**1.5**	----	----	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	----	----	----
Final pH	----	0.1	pH Unit	**5.1**	**5.1**	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	**10.1**	**9.4**	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	SX_OB_20220303_0807_SS_Primary_ALS	SX_OB_20220303_0807_SS_Duplicate_ALS	SX_OB_20220303_0807_SS_Primary_ALS	SX_OB_20220303_0807_SS_Duplicate_ALS	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203659-001**	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	--------
				Result	Result	Result	Result	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	----	----	----
1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	----	----	----
Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	----	----	----
Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	----	----	----
1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	----	----	----
Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	----	----	----
1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	----	----	----
Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	----	----	----
1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	----	----	----
Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	----	----	----
Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	----	----	----
Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	----	----	----
1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	----	----	----
1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	----	----	----
1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	----	----	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	----	----	----
^ **Sum of other chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	SX_OB_20220303_0807_SS_Primary_ALS	SX_OB_20220303_0807_SS_Duplicate_ALS	SX_OB_20220303_0807_SS_Primary_ALS	SX_OB_20220303_0807_SS_Duplicate_ALS	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	CAS Number	LOR	Unit	**EM2203659-001**	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	--------
				Result	Result	Result	Result	----
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	----	----	----
2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	----	----	----
2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	----	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	----	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	----	----	----
^ **Sum of Phenols (halogenated)**	----	0.03	mg/kg	<0.03	<0.03	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	----	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	----	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	----	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	----	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	----	----	----
Dinoseb	88-85-7	5	mg/kg	<5	<5	----	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	----	----	----
^ **Sum of Phenols (non-halogenated)**	----	1	mg/kg	<1	<1	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Duplicate_ALS	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Duplicate_ALS	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203659-001**	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	--------
				Result	Result	Result	Result	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	----	----	----
beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	----	----	----
gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	----	----	----
delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	----	----	----
Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	----	----	----
Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	----	----	----
Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	----	----	----
Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	----	----	----
^ **Sum of organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	----	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	**----**
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203659-001**	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	**--------**
				Result	Result	Result	Result	----
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.03	mg/kg	<0.03	<0.03	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	----	----	----
^ **Chlordane**	57-74-9	0.03	mg/kg	<0.03	<0.03	----	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Duplicate_ALS	SX_OB_20220303_08_07_SS_Primary_ALS	SX_OB_20220303_08_07_SS_Duplicate_ALS	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
Compound	CAS Number	LOR	Unit	EM2203659-001	EM2203659-002	EM2203659-003	EM2203659-004	--------
				Result	Result	Result	Result	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	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	----	----	----
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	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	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	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	*CAS Number*	*LOR*	*Unit*	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	**SX_OB_20220303_08_07_SS_Primary_ALS**	**SX_OB_20220303_08_07_SS_Duplicate_ALS**	----
			Sampling date / time	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	03-Mar-2022 08:07	----
				EM2203659-001	**EM2203659-002**	**EM2203659-003**	**EM2203659-004**	--------
				Result	Result	Result	Result	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
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	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**104**	**96.6**	----	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**104**	**95.3**	----	----	----
Toluene-D8	2037-26-5	0.1	%	**86.8**	**99.6**	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	**116**	**107**	----	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**92.4**	**90.4**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**78.2**	**77.3**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**95.8**	**86.8**	----	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**93.8**	**93.5**	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**83.1**	**83.8**	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	**112**	**102**	----	----	----
Anthracene-d10	1719-06-8	0.025	%	**102**	**93.7**	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	**106**	**99.6**	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**110**	**104**	----	----	----
13C8-PFOA	----	0.0002	%	**107**	**106**	----	----	----

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **DI WATER LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

QUALITY CONTROL REPORT

Work Order	: **EM2203659**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 03-Mar-2022
Order number	: ----	Date Analysis Commenced	: 04-Mar-2022
C-O-C number	: 20220303090137-ALS-6	Issue Date	: 10-Mar-2022
Sampler	: Hannah Kennedy - EP Risk		
Site	:		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4213475)									
EM2200744-023	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	19	14	25.4	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	3	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	10	8	25.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	16	14.9	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.0	No Limit
EM2203824-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	90	94	4.2	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	149	159	6.5	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	20	20	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	64	60	5.9	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	120	104	14.7	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214764)									
EM2203603-004	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	5.8	5.8	0.0	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 (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214764) - continued									
EM2203741-007	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.0	8.2	2.1	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4214316)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	34.2	34.3	0.4	0% - 20%
EM2203810-001	Anonymous	EA055: Moisture Content	----	0.1	%	12.3	12.5	1.6	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4213474)									
EM2200744-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203824-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4214290)									
EM2200744-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2203689-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4214658)									
EM2203703-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2203603-004	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4214277)									
EM2203603-004	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	220	140	48.0	No Limit
EM2203703-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	160	160	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4213439)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203715-004	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4208242)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4208242)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4208242)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	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 (%)
EP074I: Volatile Halogenated Compounds (QC Lot: 4208242) - continued									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4213441)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4213441)									

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 (%)*
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4213441) - continued									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213441)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	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 (%)
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213441) - continued									
EM2203715-004	Anonymous	EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4213441)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4213441) - continued									
EM2203715-004	Anonymous	EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4208242)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4213440)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203715-004	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4208242)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4213440)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	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 (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4213440) - continued									
EM2203715-004	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4216052)									
EM2203659-001	SX_OB_20220303_08_07_ SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4216052)									
EM2203659-001	SX_OB_20220303_08_07_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

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: 4216052) - continued									
EM2203837-009	Anonymous	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: 4216052)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	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
EM2203837-009	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4216052)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	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
EM2203837-009	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

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: 4216052) - continued									
EM2203837-009	Anonymous	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
EP231P: PFAS Sums (QC Lot: 4216052)									
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	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: 4217082)									
EM2203610-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<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
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	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: 4217083)									
EM2203610-010	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
EM2203703-009	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4217083) - continued									
EM2203703-009	Anonymous	EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.05	0.04	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4217082)									
EM2203610-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	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: 4217083)									
EM2203610-010	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

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: 4217083) - continued									
EM2203610-010	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2203703-009	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	0.03	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4217082)									
EM2203610-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	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: 4217083)									

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: 4217083) - continued									
EM2203610-010	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
EM2203703-009	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: 4217082)									
EM2203610-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	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: 4217082) - continued									
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	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: 4217083)									
EM2203610-010	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
EM2203703-009	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: 4217082)									
EM2203610-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4217083)									
EM2203610-010	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2203703-009	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.05	0.04	22.2	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	0.08	0.08	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*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213475)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	90.4	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	86.3	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	92.5	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	86.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	87.7	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	74.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	85.8	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	74.9	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	85.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	78.0	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4214475)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4214764)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213474)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	93.0	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214290)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	93.9	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214658)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	95.7	70.0	130
EK040T: Fluoride Total (QCLot: 4214277)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	95.9	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213439)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	108	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208242)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	88.8	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	85.9	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	87.0	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	84.5	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	88.8	69.4	111

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*
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208242) - continued								
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	86.6	68.4	110
EP074H: Naphthalene (QCLot: 4208242)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	97.0	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4208242)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	94.8	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	84.0	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	85.7	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	88.8	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	89.2	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	92.7	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	95.4	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	92.5	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	100	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	90.0	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	89.0	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	92.6	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	92.8	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	86.8	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	80.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	91.7	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	88.2	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	88.8	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	92.8	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213441)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	95.6	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	107	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	109	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	109	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	126	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	123	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	120	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	4 mg/kg	124	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	107	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213441)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	106	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	111	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	110	74.3	129

Sub-Matrix: **SOIL**

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
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213441) - continued								
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	109	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	105	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	79.3	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	# 150	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	# 130	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	108	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	101	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213441)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	108	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	122	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	125	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	126	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	114	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	114	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	115	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	116	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	116	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	118	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	117	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	117	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	116	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	117	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	116	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4213441)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	114	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	114	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	114	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	115	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	116	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	114	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	114	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	113	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	116	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	114	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	116	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	117	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	119	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	104	69.0	143

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*
EP075I: Organochlorine Pesticides (QCLot: 4213441) - continued								
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	143	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	118	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	116	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	117	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	115	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	117	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208242)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	100	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213440)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	88.8	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.3	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	88.6	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208242)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	98.9	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213440)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	94.4	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	88.1	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	89.4	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.4	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216052)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	90.4	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	80.5	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	69.0	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	86.9	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	91.2	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	82.9	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	92.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.9	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.1	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.2	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	72.8	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.4	64.0	136

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*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052) - continued								
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.5	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.4	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	84.3	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216052)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	89.9	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.8	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	94.3	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.6	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.0	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216052)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	92.9	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	93.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	94.1	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	81.1	70.0	130
EP231P: PFAS Sums (QCLot: 4216052)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

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: 4217082)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	104	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	97.1	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.7	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	86.4	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	103	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	90.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217083)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	96.0	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.4	71.0	127

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: 4217083) - continued								
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	101	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	89.0	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	113	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	90.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217082)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	103	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.4	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	100	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	94.3	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	85.7	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	94.5	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	93.2	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.6	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	96.3	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217083)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	104	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.6	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	94.7	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	87.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.5	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217082)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	98.1	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	115	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	101	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.3	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	112	65.0	136

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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217082) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	108	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217083)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	111	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	112	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	100	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	99.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	111	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217082)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	102	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	111	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	113	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	89.6	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217083)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	106	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	115	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	99.9	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	92.2	70.0	130
EP231P: PFAS Sums (QCLot: 4217082)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4217083)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213475)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	95.0	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.6	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	81.0	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	98.0	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	92.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	93.4	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	91.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213474)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	106	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214290)							
EM2203603-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	80.8	58.0	114
EM2203603-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	92.7	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214658)							
EM2203610-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	111	70.0	130
EK040T: Fluoride Total (QCLot: 4214277)							
EM2203610-001	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	76.2	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213439)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	99.7	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4208242)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	87.8	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	87.1	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4208242)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	85.6	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	84.3	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	86.2	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	82.5	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	87.7	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	67.2	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	90.7	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	84.9	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	81.1	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	88.4	37.8	152

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4208242)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	92.1	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213440)							
EM2203689-001	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	89.5	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	88.6	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	88.3	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	89.9	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4208242)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	91.6	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213440)							
EM2203689-001	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	94.8	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	87.4	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	89.1	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	90.3	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216052)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	87.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	83.5	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	85.9	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	86.1	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	98.8	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	94.8	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	95.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	94.8	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	95.8	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	96.8	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	97.1	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	83.5	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	87.6	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	99.2	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	90.1	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	92.7	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216052)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	95.9	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.6	70.0	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: 4216052) - continued							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	92.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	90.3	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	92.2	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216052)							
EM2203659-002	SX_OB_20220303_08_07_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	98.8	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	98.5	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	103	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	72.7	70.0	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: 4217082)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	104	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	85.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	92.7	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	90.8	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	108	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	92.8	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	110	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	109	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	103	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	99.7	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	98.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	75.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217082)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	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	105	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	104	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	102	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	107	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	95.8	71.0	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: 4217082) - continued							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	99.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	100	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	95.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	104	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	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	102	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	103	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	99.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	97.6	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	93.2	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	94.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	90.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	65.6	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 58.0	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217082)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	111	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	109	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	103	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	96.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	93.6	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	115	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	112	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	130	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	125	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	93.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	102	70.0	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: 4217083) - continued							
EM2203610-011	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	98.9	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	86.4	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217082)							
EM2203659-001	SX_OB_20220303_08_07_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	110	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	106	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	102	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	70.7	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	110	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	120	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	106	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	70.2	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203659**	Page	: 1 of 10
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 03-Mar-2022
Site	:	Issue Date	: 10-Mar-2022
Sampler	: Hannah Kennedy - EP Risk	No. of samples received	: 4
Order number	: ----	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.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075A: Phenolic Compounds (Non-halogenated)	QC-4213441-001	----	**4-Nitrophenol**	100-02-7	150 %	65.3-134%	**Recovery greater than upper control limit**
EP075A: Phenolic Compounds (Non-halogenated)	QC-4213441-001	----	**2-Methyl-4.6-dinitrophenol**	8071-51-0	130 %	43.6-128%	**Recovery greater than upper control limit**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203610--011	Anonymous	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	58.0 %	71.0-132%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	09-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**----**	----	----	**08-Mar-2022**	17-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	30-Aug-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	31-Mar-2022	✓	**09-Mar-2022**	31-Mar-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	31-Mar-2022	✓	**10-Mar-2022**	16-Mar-2022	✓

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*
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	22-Mar-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	31-Mar-2022	✓	**10-Mar-2022**	31-Mar-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	30-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	30-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**04-Mar-2022**	10-Mar-2022	✓	**05-Mar-2022**	10-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**04-Mar-2022**	10-Mar-2022	✓	**05-Mar-2022**	10-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**04-Mar-2022**	10-Mar-2022	✓	**05-Mar-2022**	10-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**04-Mar-2022**	10-Mar-2022	✓	**05-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓

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*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**04-Mar-2022**	10-Mar-2022	✓	**05-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**08-Mar-2022**	17-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓

Matrix: **WATER**

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

Method	*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)		*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS, SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS, SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS, SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS, SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓

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) SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS, SX_OB_20220303_08_07_SS_Primary_ALS, SX_OB_20220303_08_07_SS_Duplicate_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

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*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**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	37	**10.81**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	37	**5.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	37	**5.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	37	**5.41**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	*Method*	*Matrix*	*Method Descriptions*
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220303090137-ALS-6
P.O. NO.:
RESULTS REQUIRED (**Date**): 3 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: Hannah Kennedy - EP Risk
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@
motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Note

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1,3	SX_OB_20220303_08_07_SS_Primary_ALS	S	3/03/2022	8:07	Bucket	1	x	x	x	x	x
2,4	SX_OB_20220303_08_07_SS_Duplicate_ALS	S	3/03/2022	8:07	Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x

URGENT

Environmental Division
Melbourne
Work Order Reference
EM2203659

Telephone : + 61-3-8549 9600

Received: 1445
C/note:
Temp 28-7 °C Seal: Y / [✓ N]
Ice / Iceblocks [✓ NA]
3/3
Carrier:

RELINQUISHED BY:
Name: Hannah Kennedy
Of:
Date:03.03.22
Time:

RECEIVED BY
Name:
Of:
Date:
Time:
Con

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

Name:		Name:		
Of:	Date:	Of:	Date:	Tran
	Time:		Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unprese
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde F
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

ustralian Laboratory Services Pty Ltd

esdat.com.au

agonenvironmental@esdat.com.au

s:

METHOD OF SHIPMENT

Note No:

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

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COC Page ___ of ___

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220303090137-ALS-6
P.O. NO.:
RESULTS REQUIRED (Date): 3 days
QUOTE NO.: ME-150-19 WGTP

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EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@
motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Note

URGENT

Environmental Division
Melbourne
Work Order Reference
EM2203659
Telephone : + 61-3-8549 9600

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1, 3	SX_OB_20220303_08_07_SS_Primary_ALS	S	3/03/2022	8:07	Bucket	1	x	x	x	x	x
2, 4	SX_OB_20220303_08_07_SS_Duplicate_ALS	S	3/03/2022	8:07	Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x
		S			Bucket	1	x	x	x	x	x

3/3

Received: 1445
Carrier:
C/note:
Temp: 28.7 °C Seal: Y [✓ N]
Ice / Icebricks: [✓ NA]

RELINQUISHED BY:
Name: Hannah Kennedy
Of:
Date: 03.03.22
Time:

RECEIVED BY
Name:
Of:
Date:
Time:
Con

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

Name:	Date:	Name:	Date:	Tran
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unprese
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde F
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

ustralian Laboratory Services Pty Ltd

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s:

METHOD OF SHIPMENT

' Note No:

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171   Phone (03) 8549 9600;   Facsimile (03) 8549 9601.   Email Samples.Melbourne@alsenviro.com

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COC Page ___ of ___

CERTIFICATE OF ANALYSIS

Work Order	: **EM2203824**	Page	: 1 of 15
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 03-Mar-2022 14:45
Order number	: ----	Date Analysis Commenced	: 07-Mar-2022
C-O-C number	: 20220303044544-ALS-6	Issue Date	: 10-Mar-2022 17:48
Sampler	: DAVID LAWSON		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 8		
No. of samples analysed	: 8		

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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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: Poor matrix spike recovery for sample EM2203610-010 due to sample matrix interference.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	--------
				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	<0.01	<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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

Sample ID				**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----
Sampling date / time				02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	--------
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**97.1**	**100**	**104**	**100**	----
13C8-PFOA	----	0.02	%	**112**	**110**	**106**	**107**	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 00:00	02-Mar-2022 00:00	02-Mar-2022 00:00	02-Mar-2022 00:00	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-005**	**EM2203824-006**	**EM2203824-007**	**EM2203824-008**	--------
				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: **DI WATER LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----
			Sampling date / time	02-Mar-2022 00:00	02-Mar-2022 00:00	02-Mar-2022 00:00	02-Mar-2022 00:00	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-005**	**EM2203824-006**	**EM2203824-007**	**EM2203824-008**	--------
				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	%	**100**	**84.2**	**81.5**	**87.4**	----
13C8-PFOA	----	0.02	%	**110**	**105**	**98.5**	**102**	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	**SX_OB_20220302_12_11_SS_Primary_ALS**
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**7.8**	**7.8**	**7.7**	**7.7**	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**31.0**	**31.1**	**31.6**	**32.1**	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**19**	**18**	**20**	**21**	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	5	mg/kg	**90**	**81**	**90**	**92**	----
Copper	7440-50-8	5	mg/kg	**57**	**51**	**64**	**59**	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	----
Nickel	7440-02-0	5	mg/kg	**144**	**132**	**149**	**145**	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	----
Tin	7440-31-5	10	mg/kg	<10	<10	<10	<10	----
Zinc	7440-66-6	5	mg/kg	**99**	**94**	**120**	**108**	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	**250**	**170**	**160**	**170**	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.3**	**9.1**	**8.8**	**9.1**	----
After HCl pH	----	0.1	pH Unit	**1.6**	**1.3**	**1.3**	**1.4**	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	**5.0**	----
Final pH	----	0.1	pH Unit	**5.1**	**5.1**	**5.1**	**5.1**	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	----	**9.6**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	SX_OB_20220302_12_11_SS_Primary_ALS	SX_OB_20220302_16_04_SS_Primary_ALS	SX_OB_20220302_16_07_SS_Triplicate_ALS	SX_OB_20220302_23_54_SS_Primary_ALS	SX_OB_20220302_12_11_SS_Primary_ALS
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	**SX_OB_20220302_12_11_SS_Primary_ALS**
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg	<20	<20	<20	<20	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	**SX_OB_20220302_12_11_SS_Primary_ALS**
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_OB_20220302_12_11_SS_Primary_ALS	SX_OB_20220302_16_04_SS_Primary_ALS	SX_OB_20220302_16_07_SS_Triplicate_ALS	SX_OB_20220302_23_54_SS_Primary_ALS	SX_OB_20220302_12_11_SS_Primary_ALS
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2203824-001	EM2203824-002	EM2203824-003	EM2203824-004	EM2203824-005
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Chlordane**	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	SX_OB_20220302_12_11_SS_Primary_ALS	SX_OB_20220302_16_04_SS_Primary_ALS	SX_OB_20220302_16_07_SS_Triplicate_ALS	SX_OB_20220302_23_54_SS_Primary_ALS	SX_OB_20220302_12_11_SS_Primary_ALS
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_12_11_SS_Primary_ALS**	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	**SX_OB_20220302_12_11_SS_Primary_ALS**
			Sampling date / time	02-Mar-2022 12:11	02-Mar-2022 16:04	02-Mar-2022 16:07	02-Mar-2022 23:54	02-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-001**	**EM2203824-002**	**EM2203824-003**	**EM2203824-004**	**EM2203824-005**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**87.0**	**86.8**	**99.5**	**92.6**	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**94.3**	**84.9**	**92.2**	**100**	----
Toluene-D8	2037-26-5	0.1	%	**92.7**	**88.3**	**94.4**	**99.6**	----
4-Bromofluorobenzene	460-00-4	0.1	%	**110**	**104**	**97.1**	**111**	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**83.4**	**81.6**	**96.5**	**87.8**	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**69.7**	**75.0**	**88.9**	**80.7**	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**74.5**	**64.2**	**83.9**	**76.3**	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**82.0**	**79.3**	**92.8**	**84.0**	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**73.5**	**74.8**	**85.7**	**77.6**	----
2-Fluorobiphenyl	321-60-8	0.025	%	**92.5**	**90.6**	**102**	**93.0**	----
Anthracene-d10	1719-06-8	0.025	%	**85.6**	**83.5**	**94.4**	**86.8**	----
4-Terphenyl-d14	1718-51-0	0.025	%	**91.2**	**87.2**	**97.0**	**88.1**	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**88.2**	**91.0**	**98.6**	**100**	----
13C8-PFOA	----	0.0002	%	**105**	**106**	**109**	**107**	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220302_1604_SS_Primary_ALS**	**SX_OB_20220302_1607_SS_Triplicate_ALS**	**SX_OB_20220302_2354_SS_Primary_ALS**	**----**	**----**
			Sampling date / time	02-Mar-2022 00:00	02-Mar-2022 00:00	02-Mar-2022 00:00	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203824-006**	**EM2203824-007**	**EM2203824-008**	**--------**	**--------**
				Result	Result	Result	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.6**	**9.5**	**9.5**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **DI WATER LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

ALS Environmental

Automated Guideline Comparison Report

EPA Victoria Publication IWRG 621 (2009) - Table 2: Soil Hazard Categorisation

Work Order	: **EM2203824**	Page	: 1 of 14
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: ----	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: ----	Telephone	: +6138549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 03-Mar-2022 14:45
Order number	: ----	Date Analysed	: 07-Mar-2022
C-O-C number	: 20220303044544-ALS-6	Date Issued	: 10-Mar-2022 17:48
No. of samples received	: 8		
No. of samples analysed	: 8	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

General Comments

This guideline comparison report **only** provides comparison of total concentration data against upper limit thresholds for the 'Fill Material', 'C', 'B' Categories in Table 2 of EPA Publication IWRG621.

This guideline comparison report is **NOT** a soil classification report. Classification of soils as Fill Material, Category C, Category B or Category A requires consideration of a number of other factors including preliminary site investigation, sampling density and statistical calculations, as set out in EPA Publication IWRG 702 and measurement uncertainty.

This guideline comparison report only provides comparison data for parameters, specifically listed within the IWRG621 (2009) guideline, that are analysed by ALS.

Only results in the 'Analytical Results' section have been compared to the guideline.

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

Summary of Thresholds Reached or Exceeded

EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Client Sample ID	*ALS Sample ID*	*Compound*	*Method*	*LOR*	*Limits*	*Result*
SX_OB_20220302_12_11_SS_Primary_ALS	**EM2203824-001**	Nickel	EG005T	5	*< 60 mg/kg*	**144 mg/kg**
SX_OB_20220302_16_04_SS_Primary_ALS	**EM2203824-002**	Nickel	EG005T	5	*< 60 mg/kg*	**132 mg/kg**
SX_OB_20220302_16_07_SS_Triplicate_ALS	**EM2203824-003**	Arsenic	EG005T	5	*< 20 mg/kg*	**20 mg/kg**
SX_OB_20220302_16_07_SS_Triplicate_ALS	**EM2203824-003**	Nickel	EG005T	5	*< 60 mg/kg*	**149 mg/kg**
SX_OB_20220302_23_54_SS_Primary_ALS	**EM2203824-004**	Arsenic	EG005T	5	*< 20 mg/kg*	**21 mg/kg**
SX_OB_20220302_23_54_SS_Primary_ALS	**EM2203824-004**	Nickel	EG005T	5	*< 60 mg/kg*	**145 mg/kg**

Analytical Results

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	SX_OB_20220302_12_11_SS_Primary_ALS		SX_OB_20220302_16_04_SS_Primary_ALS		SX_OB_20220302_16_07_SS_Triplicate_ALS		SX_OB_20220302_23_54_SS_Primary_ALS		SX_OB_20220302_12_11_SS_Primary_ALS	
			Sampling date/time			02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	**7.8**	± 0.1	**7.8**	± 0.1	**7.7**	± 0.1	**7.7**	± 0.1	----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	2000	**19**	± 3	**18**	± 3	**20**	± 3	**21**	± 3	----	
Cadmium	EG005T	1	mg/kg	----	400	<1	--	<1	--	<1	--	<1	--	----	
Copper	EG005T	5	mg/kg	----	20000	**57**	± 7	**51**	± 6	**64**	± 8	**59**	± 7	----	
Lead	EG005T	5	mg/kg	----	6000	<5	--	<5	--	<5	--	<5	--	----	
Molybdenum	EG005T	5	mg/kg	----	4000	<5	--	<5	--	<5	--	<5	--	----	
Nickel	EG005T	5	mg/kg	----	12000	**144**	± 14	**132**	± 13	**149**	± 15	**145**	± 14	----	
Selenium	EG005T	5	mg/kg	----	200	<5	--	<5	--	<5	--	<5	--	----	
Silver	EG005T	2	mg/kg	----	720	<2	--	<2	--	<2	--	<2	--	----	
Zinc	EG005T	5	mg/kg	----	140000	**99**	± 11	**94**	± 10	**120**	± 13	**108**	± 12	----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	300	<0.1	--	<0.1	--	<0.1	--	<0.1	--	----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0	--	<1.0	--	<1.0	--	<1.0	--	----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5	--	<5	--	<5	--	<5	--	----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	40000	**250**	± 50	**170**	± 40	**160**	± 40	**170**	± 40	----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2	--	<0.2	--	<0.2	--	<0.2	--	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00	--	<1.00	--	<1.00	--	<1.00	--	----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	**SX_OB_20220302_12_11_SS_Primary_ALS**		**SX_OB_20220302_16_04_SS_Primary_ALS**		**SX_OB_20220302_16_07_SS_Triplicate_ALS**		**SX_OB_20220302_23_54_SS_Primary_ALS**		**SX_OB_20220302_12_11_SS_Primary_ALS**	
			Sampling date/time			02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20	--	<20	--	<20	--	<20	--	----	
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05	--	<0.05	--	<0.05	--	<0.05	--	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30	--	<0.30	--	<0.30	--	<0.30	--	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	<0.05	--	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10	--	<0.10	--	<0.10	--	<0.10	--	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03	--	<0.03	--	<0.03	--	<0.03	--	----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20	--	<20	--	<20	--	<20	--	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50	--	<50	--	<50	--	<50	--	----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220302_12_11_SS_Primary_ALS**		**SX_OB_20220302_16_04_SS_Primary_ALS**		**SX_OB_20220302_16_07_SS_Triplicate_ALS**		**SX_OB_20220302_23_54_SS_Primary_ALS**		**SX_OB_20220302_12_11_SS_Primary_ALS**	
			Sampling date/time			02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**7.8**	± 0.1	**7.8**	± 0.1	**7.7**	± 0.1	**7.7**	± 0.1	----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	500	**19**	± 3	**18**	± 3	**20**	± 3	**21**	± 3	----	
Cadmium	EG005T	1	mg/kg	----	100	<1	--	<1	--	<1	--	<1	--	----	
Copper	EG005T	5	mg/kg	----	5000	**57**	± 7	**51**	± 6	**64**	± 8	**59**	± 7	----	
Lead	EG005T	5	mg/kg	----	1500	<5	--	<5	--	<5	--	<5	--	----	
Molybdenum	EG005T	5	mg/kg	----	1000	<5	--	<5	--	<5	--	<5	--	----	
Nickel	EG005T	5	mg/kg	----	3000	**144**	± 14	**132**	± 13	**149**	± 15	**145**	± 14	----	
Selenium	EG005T	5	mg/kg	----	50	<5	--	<5	--	<5	--	<5	--	----	
Silver	EG005T	2	mg/kg	----	180	<2	--	<2	--	<2	--	<2	--	----	
Tin	EG005T	10	mg/kg	----	500	<10	--	<10	--	<10	--	<10	--	----	
Zinc	EG005T	5	mg/kg	----	35000	**99**	± 11	**94**	± 10	**120**	± 13	**108**	± 12	----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	75	<0.1	--	<0.1	--	<0.1	--	<0.1	--	----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0	--	<1.0	--	<1.0	--	<1.0	--	----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5	--	<5	--	<5	--	<5	--	----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	10000	**250**	± 50	**170**	± 40	**160**	± 40	**170**	± 40	----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2	--	<0.2	--	<0.2	--	<0.2	--	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00	--	<1.00	--	<1.00	--	<1.00	--	----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220302_12_11_SS_Primary_ALS**		**SX_OB_20220302_16_04_SS_Primary_ALS**		**SX_OB_20220302_16_07_SS_Triplicate_ALS**		**SX_OB_20220302_23_54_SS_Primary_ALS**		**SX_OB_20220302_12_11_SS_Primary_ALS**	
			Sampling date/time	Guideline	Guideline	02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EP075A: Phenolic Compounds (Non-halogenated)															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20	--	<20	--	<20	--	<20	--	----	
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP075I: Organochlorine Pesticides															
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	--	<0.05	--	<0.05	--	<0.05	--	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	--	<0.30	--	<0.30	--	<0.30	--	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	<0.05	--	<0.05	--	<0.05	--	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	--	<0.10	--	<0.10	--	<0.10	--	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	--	<0.03	--	<0.03	--	<0.03	--	----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	--	<20	--	<20	--	<20	--	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	--	<50	--	<50	--	<50	--	----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID	Guideline	Guideline	**SX_OB_20220302_12_11_SS_Primary_ALS**		**SX_OB_20220302_16_04_SS_Primary_ALS**		**SX_OB_20220302_16_07_SS_Triplicate_ALS**		**SX_OB_20220302_23_54_SS_Primary_ALS**		**SX_OB_20220302_12_11_SS_Primary_ALS**	
			Sampling date/time			02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**7.8**	± 0.1	**7.8**	± 0.1	**7.7**	± 0.1	**7.7**	± 0.1	----	
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	20	**19**	± 3	**18**	± 3	**20**	± 3	**21**	± 3	----	
Cadmium	EG005T	1	mg/kg	----	3	<1	--	<1	--	<1	--	<1	--	----	
Copper	EG005T	5	mg/kg	----	100	**57**	± 7	**51**	± 6	**64**	± 8	**59**	± 7	----	
Lead	EG005T	5	mg/kg	----	300	<5	--	<5	--	<5	--	<5	--	----	
Molybdenum	EG005T	5	mg/kg	----	40	<5	--	<5	--	<5	--	<5	--	----	
Nickel	EG005T	5	mg/kg	----	60	**144**	± 14	**132**	± 13	**149**	± 15	**145**	± 14	----	
Selenium	EG005T	5	mg/kg	----	10	<5	--	<5	--	<5	--	<5	--	----	
Silver	EG005T	2	mg/kg	----	10	<2	--	<2	--	<2	--	<2	--	----	
Tin	EG005T	10	mg/kg	----	50	<10	--	<10	--	<10	--	<10	--	----	
Zinc	EG005T	5	mg/kg	----	200	**99**	± 11	**94**	± 10	**120**	± 13	**108**	± 12	----	
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	1	<0.1	--	<0.1	--	<0.1	--	<0.1	--	----	
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0	--	<1.0	--	<1.0	--	<1.0	--	----	
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	50	<5	--	<5	--	<5	--	<5	--	----	
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	450	**250**	± 50	**170**	± 40	**160**	± 40	**170**	± 40	----	
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1	--	<0.1	--	<0.1	--	<0.1	--	----	
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2	--	<0.2	--	<0.2	--	<0.2	--	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP074I: Volatile Halogenated Compounds															
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50	--	<0.50	--	<0.50	--	<0.50	--	----	
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00	--	<1.00	--	<1.00	--	<1.00	--	----	
EP075A: Phenolic Compounds (Non-halogenated)															

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**			*Sample ID*			**SX_OB_20220302_12_11_SS_Primary_ALS**		**SX_OB_20220302_16_04_SS_Primary_ALS**		**SX_OB_20220302_16_07_SS_Triplicate_ALS**		**SX_OB_20220302_23_54_SS_Primary_ALS**		**SX_OB_20220302_12_11_SS_Primary_ALS**	
			Sampling date/time	Guideline	Guideline	02-Mar-2022 12:11		02-Mar-2022 16:04		02-Mar-2022 16:07		02-Mar-2022 23:54		02-Mar-2022 15:00	
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-001**	MU	**EM2203824-002**	MU	**EM2203824-003**	MU	**EM2203824-004**	MU	**EM2203824-005**	MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued															
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20	--	<20	--	<20	--	<20	--	----	
EP075B: Polynuclear Aromatic Hydrocarbons															
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5	--	<0.5	--	<0.5	--	<0.5	--	----	
EP075I: Organochlorine Pesticides															
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	--	<0.10	--	<0.10	--	<0.10	--	----	
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20	--	<20	--	<20	--	<20	--	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50	--	<50	--	<50	--	<50	--	----	

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----	----
			Sampling date/time			02-Mar-2022 15:00	02-Mar-2022 15:00	02-Mar-2022 15:00	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-006** MU	**EM2203824-007** MU	**EM2203824-008** MU		
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: **SOIL**

			Sample ID			**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	**----**	**----**
			Sampling date/time	Guideline	Guideline	02-Mar-2022 15:00	02-Mar-2022 15:00	02-Mar-2022 15:00	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-006** MU	**EM2203824-007** MU	**EM2203824-008** MU		
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**			*Sample ID*	Guideline	Guideline	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----	----
			Sampling date/time			02-Mar-2022 15:00	02-Mar-2022 15:00	02-Mar-2022 15:00	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-006** MU	**EM2203824-007** MU	**EM2203824-008** MU		
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C

Sub-Matrix: **SOIL**

Compound	Method	LOR	Unit	Guideline Lower Limit	Guideline Upper Limit	SX_OB_20220302_16_04_SS_Primary_ALS 02-Mar-2022 15:00 EM2203824-006 MU	SX_OB_20220302_16_07_SS_Triplicate_ALS 02-Mar-2022 15:00 EM2203824-007 MU	SX_OB_20220302_23_54_SS_Primary_ALS 02-Mar-2022 15:00 EM2203824-008 MU	---- ----	---- ----
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
Heptachlor	EP075-EM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	----	----	----	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	----	----	----	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID	Guideline	Guideline	**SX_OB_20220302_16_04_SS_Primary_ALS**	**SX_OB_20220302_16_07_SS_Triplicate_ALS**	**SX_OB_20220302_23_54_SS_Primary_ALS**	----	----
			Sampling date/time			02-Mar-2022 15:00	02-Mar-2022 15:00	02-Mar-2022 15:00	----	----
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2203824-006** MU	**EM2203824-007** MU	**EM2203824-008** MU		
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: **SOIL**

			Sample ID			SX_OB_20220302_16_04_SS_Primary_ALS	SX_OB_20220302_16_07_SS_Triplicate_ALS	SX_OB_20220302_23_54_SS_Primary_ALS	----	----
			Sampling date/time	Guideline	Guideline	02-Mar-2022 15:00	02-Mar-2022 15:00	02-Mar-2022 15:00	----	----
Compound	Method	LOR	Unit	Lower Limit	Upper Limit	EM2203824-006 MU	EM2203824-007 MU	EM2203824-008 MU		
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	----	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	----	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	----	----	----	----	----
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	----	----	----	----	----

Environmental

QUALITY CONTROL REPORT

Work Order : **EM2203824**

Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : CRAIG TRIMBUR
Address : D1.1 63-85 TURNER STREET
PORT MELBOURNE 3207
Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220303044544-ALS-6
Sampler : DAVID LAWSON
Site : ----
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 8
No. of samples analysed : 8

Page : 1 of 25

Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +6138549 9600
Date Samples Received : 03-Mar-2022
Date Analysis Commenced : 07-Mar-2022
Issue Date : 10-Mar-2022

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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4213475)									
EM2200744-023	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	19	14	25.4	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	3	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	10	8	25.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	16	14.9	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.0	No Limit
EM2203824-003	SX_OB_20220302_16_07_ SS_Triplicate_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	90	94	4.2	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	149	159	6.5	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	20	20	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	64	60	5.9	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	120	104	14.7	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214764)									

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 (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214764) - continued									
EM2203603-004	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	5.8	5.8	0.0	0% - 20%
EM2203741-007	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.0	8.2	2.1	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214765)									
EM2203824-004	SX_OB_20220302_23_54_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.7	7.7	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4214317)									
EM2203815-004	Anonymous	EA055: Moisture Content	----	0.1	%	25.4	28.6	12.1	0% - 20%
EM2203837-002	Anonymous	EA055: Moisture Content	----	0.1	%	15.7	13.5	15.2	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4213474)									
EM2200744-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203824-003	SX_OB_20220302_16_07_SS_Triplicate_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4214290)									
EM2200744-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2203689-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4214291)									
EM2203824-003	SX_OB_20220302_16_07_SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203944-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4214658)									
EM2203703-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2203603-004	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4214277)									
EM2203603-004	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	220	140	48.0	No Limit
EM2203703-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	160	160	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4214278)									
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	170	180	8.7	No Limit
EM2203846-005	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	180	160	8.4	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4213439)									
EM2203659-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203715-004	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4211449)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	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 (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4211449) - continued									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4211449)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4211449)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4213441)									
EM2203659-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4213441) - continued									
EM2203715-004	Anonymous	EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4213441)									
EM2203659-001	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213441)									
EM2203659-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	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 (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213441) - continued									
EM2203659-001	Anonymous	EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4213441)									
EM2203659-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	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 (%)***
EP075I: Organochlorine Pesticides (QC Lot: 4213441) - continued									
EM2203659-001	Anonymous	EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203715-004	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4211449)									
EM2203824-001	SX_OB_20220302_12_11_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4213440)									
EM2203659-001	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203715-004	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4211449)									
EM2203824-001	SX_OB_20220302_12_11_ SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4213440)									

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 (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4213440) - continued									
EM2203659-001	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203715-004	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4216052)									
EM2203659-001	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	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4216052)									
EM2203659-001	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	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

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: 4216052) - continued									
EM2203837-009	Anonymous	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: 4216052)									
EM2203659-001	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
EM2203837-009	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4216052)									
EM2203659-001	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: **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: 4216052) - continued									
EM2203837-009	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
EP231P: PFAS Sums (QC Lot: 4216052)									
EM2203659-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203837-009	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	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: 4216285)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	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: 4217083)									
EM2203610-010	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
EM2203703-009	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	0.05	0.04	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4216285)									
EM2203824-001	SX_OB_20220302_12_11_ SS_Primary_ALS	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: 4217083)									
EM2203610-010	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
EM2203703-009	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	0.03	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4216285)									
EM2203824-001	SX_OB_20220302_12_11_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	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: 4216285) - continued									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4217083)									
EM2203610-010	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
EM2203703-009	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: 4216285)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	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: 4216285) - continued									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	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: 4217083)									
EM2203610-010	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
EM2203703-009	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: 4216285)									
EM2203824-001	SX_OB_20220302_12_11_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4217083)									
EM2203610-010	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2203703-009	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.05	0.04	22.2	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	0.08	0.08	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*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213475)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	90.4	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	86.3	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	92.5	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	86.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	87.7	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	74.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	85.8	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	74.9	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	85.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	78.0	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4214475)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4214764)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	101 100	98.8 99.3	101 101
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4214765)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	101 100	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213474)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	93.0	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214290)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	93.9	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214291)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	92.2	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214658)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	95.7	70.0	130
EK040T: Fluoride Total (QCLot: 4214277)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	95.9	75.2	110
EK040T: Fluoride Total (QCLot: 4214278)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	82.3	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213439)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	108	67.4	136

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*
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	85.6	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	95.0	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	95.4	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	92.3	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	93.0	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	93.4	68.4	110
EP074H: Naphthalene (QCLot: 4211449)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	94.6	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4211449)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	90.2	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	85.5	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	83.8	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	88.6	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	87.4	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	88.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	87.4	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	86.1	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	88.2	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	96.4	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	89.8	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	93.0	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	74.6	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	91.2	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	84.2	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	83.3	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	85.4	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213441)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	95.6	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	107	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	109	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	109	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	126	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	123	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	120	69.4	126

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*
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213441) - continued								
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	124	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	107	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213441)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	106	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	111	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	110	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	109	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	105	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	79.3	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	# 150	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	# 130	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	108	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	101	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213441)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	108	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	122	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	125	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	126	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	114	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	114	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	115	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	116	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	116	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	118	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	117	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	117	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	116	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	117	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	116	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4213441)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	114	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	114	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	114	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	115	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	116	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	114	75.5	131

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low	High
EP075I: Organochlorine Pesticides (QCLot: 4213441) - continued								
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	114	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	113	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	116	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	114	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	116	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	117	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	119	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	104	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	143	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	118	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	116	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	117	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	115	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	117	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4211449)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	111	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213440)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	88.8	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.3	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	88.6	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4211449)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	110	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213440)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	94.4	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	88.1	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	89.4	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.4	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216052)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	90.4	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	80.5	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	69.0	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	86.9	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	91.2	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	82.9	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052)								

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*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052) - continued								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	92.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.9	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.1	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.2	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	72.8	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.4	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.5	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.4	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	84.3	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216052)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	89.9	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.8	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	94.3	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.6	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.0	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216052)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	92.9	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	93.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	94.1	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	81.1	70.0	130
EP231P: PFAS Sums (QCLot: 4216052)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

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: 4216285)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	100	72.0	130

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: 4216285) - continued								
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	87.9	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	94.1	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	98.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	93.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217083)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	96.0	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.4	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	101	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	89.0	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	113	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	90.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216285)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	92.1	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	95.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.3	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	93.7	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.2	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	99.5	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	97.5	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217083)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	104	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.6	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	94.7	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	87.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.5	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	94.4	67.0	137

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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285) - continued								
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	110	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
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	93.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217083)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	111	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	112	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	100	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	99.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	111	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216285)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	97.9	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	83.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	106	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	93.7	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217083)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	106	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	115	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	99.9	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	92.2	70.0	130
EP231P: PFAS Sums (QCLot: 4216285)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4217083)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----

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
EP231P: PFAS Sums (QCLot: 4217083) - continued								
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
				Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213475)							
EM2203659-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	95.0	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.6	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	81.0	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	98.0	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	92.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	93.4	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	91.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213474)							
EM2203659-001	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	106	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214290)							
EM2203603-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	80.8	58.0	114
EM2203603-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	92.7	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4214291)							
EM2203824-004	SX_OB_20220302_23_54_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	88.8	58.0	114
EM2203824-004	SX_OB_20220302_23_54_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	98.4	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214658)							
EM2203610-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	111	70.0	130
EK040T: Fluoride Total (QCLot: 4214277)							
EM2203610-001	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	76.2	70.0	130
EK040T: Fluoride Total (QCLot: 4214278)							
EM2203824-003	SX_OB_20220302_16_07_SS_Triplicate_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	70.0	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213439)							
EM2203659-002	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	99.7	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449) - continued							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	80.1	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	76.5	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4211449)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	73.5	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	70.4	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	68.8	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	82.5	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	87.7	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	67.2	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	90.7	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	84.9	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213441)							
EM2203689-003	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	81.1	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	88.4	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4211449)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	78.6	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213440)							
EM2203689-001	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	89.5	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	88.6	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	88.3	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	89.9	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4211449)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	77.2	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213440)							
EM2203689-001	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	94.8	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	87.4	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	89.1	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	90.3	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216052)							
EM2203659-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	87.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	83.5	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	85.9	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	86.1	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	98.8	68.0	136

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216052) - continued							
EM2203659-002	Anonymous	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	94.8	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216052)							
EM2203659-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	95.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	94.8	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	95.8	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	96.8	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	97.1	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	83.5	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	87.6	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	99.2	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	90.1	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	92.7	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216052)							
EM2203659-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	95.9	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.6	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	92.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	90.3	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	92.2	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216052)							
EM2203659-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	98.8	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	98.5	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	103	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	72.7	70.0	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: 4216285)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	103	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	85.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	92.0	68.0	131

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: 4216285) - continued							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.0	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	83.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	110	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	109	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	103	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	99.7	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	98.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	75.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216285)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	95.4	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	97.1	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	96.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	102	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	101	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	92.8	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	107	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	102	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	104	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	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	102	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	103	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	99.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	97.6	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	93.2	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	94.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	90.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	65.6	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 58.0	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.2	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	112	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: 4216285) - continued							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	110	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	110	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	95.7	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	104	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	112	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	130	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	125	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	93.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	102	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	98.9	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	86.4	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216285)							
EM2203824-002	SX_OB_20220302_16_04_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	100.0	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	101	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	105	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	85.3	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217083)							
EM2203610-011	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	110	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	120	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	106	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	70.2	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203824**	Page	: 1 of 10
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 03-Mar-2022
Site	: ----	Issue Date	: 10-Mar-2022
Sampler	: DAVID LAWSON	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 8

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.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075A: Phenolic Compounds (Non-halogenated)	QC-4213441-001	----	**4-Nitrophenol**	100-02-7	150 %	65.3-134%	**Recovery greater than upper control limit**
EP075A: Phenolic Compounds (Non-halogenated)	QC-4213441-001	----	**2-Methyl-4.6-dinitrophenol**	8071-51-0	130 %	43.6-128%	**Recovery greater than upper control limit**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2203610--011	Anonymous	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	58.0 %	71.0-132%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	09-Mar-2022	✓	**09-Mar-2022**	09-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**----**	----	----	**08-Mar-2022**	16-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	29-Aug-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	30-Mar-2022	✓	**09-Mar-2022**	30-Mar-2022	✓

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*
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	30-Mar-2022	✓	**10-Mar-2022**	16-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**09-Mar-2022**	22-Mar-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	30-Mar-2022	✓	**10-Mar-2022**	30-Mar-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	29-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	09-Mar-2022	✓	**07-Mar-2022**	09-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	09-Mar-2022	✓	**07-Mar-2022**	09-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	09-Mar-2022	✓	**07-Mar-2022**	09-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓

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*
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	09-Mar-2022	✓	**07-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**07-Mar-2022**	09-Mar-2022	✓	**07-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**08-Mar-2022**	16-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓

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*
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**02-Mar-2022**	**09-Mar-2022**	29-Aug-2022	✓	**09-Mar-2022**	18-Apr-2022	✓

Matrix: **WATER**

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

Method	***Sample Date***	*Extraction / Preparation*			*Analysis*		
Container */ Client Sample ID(s)*		***Date extracted***	*Due for extraction*	*Evaluation*	***Date analysed***	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS, SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS, SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS, SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS, SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS, SX_OB_20220302_12_11_SS_Primary_ALS, SX_OB_20220302_16_04_SS_Primary_ALS, SX_OB_20220302_16_07_SS_Triplicate_ALS, SX_OB_20220302_23_54_SS_Primary_ALS	**08-Mar-2022**	**09-Mar-2022**	04-Sep-2022	✓	**09-Mar-2022**	04-Sep-2022	✓

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	4	31	**12.90**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	26	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type *Analytical Methods*	*Method*	*Count* *QC*	 *Regular*	*Rate (%)* ***Actual***	 ***Expected***	 *Evaluation*	*Quality Control Specification*
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**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 *Analytical Methods*	*Method*	*Count* *QC*	 *Regular*	*Rate (%)* ***Actual***	 ***Expected***	 *Evaluation*	*Quality Control Specification*
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	26	**7.69**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	*Method*	*Matrix*	*Method Descriptions*
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. 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 and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220303044544-ALS-6
P.O. NO.:
RESULTS REQUIRED (Date): 5 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: David - AGON
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1,5	SX_OB_20220302_12_11_SS_Primary_ALS	S	2/03/2022	12:11	Bucket	1	x	x	x	x	x
2,6	SX_OB_20220302_16_04_SS_Primary_ALS	S	2/03/2022	16:04	Bucket	1	x	x	x	x	x
3,7	SX_OB_20220302_16_07_SS_Triplicate_ALS	S	2/03/2022	16:07	Bucket	1	x	x	x	x	x
4,8	SX_OB_20220302_23_54_SS_Primary_ALS	S	2/03/2022	23:54	Bucket	1	x	x	x	x	x

Notes:

Environmental Division
Melbourne
Work Order Reference
EM2203824

Telephone : + 61-3-8549 9600

Received: 1445 3/3 Carrier: —
C/note:
Temp: 28.7°C Seal: Y / [✓ N]
Ice / Icebricks [✓ N/A]

ALS

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Hamel Cennedy	Date: 3/3/12	Name:	Date:	Con' Note No:
Of:	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Presereved Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220303044544-ALS-6
P.O. NO.:
RESULTS REQUIRED (Date): 5 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: David - AGON
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1,5	SX_OB_20220302_12_11_SS_Primary_ALS	S	2/03/2022	12:11	Bucket	1	x	x	x	x	x
2,6	SX_OB_20220302_16_04_SS_Primary_ALS	S	2/03/2022	16:04	Bucket	1	x	x	x	x	x
3,7	SX_OB_20220302_16_07_SS_Triplicate_ALS	S	2/03/2022	16:07	Bucket	1	x	x	x	x	x
4,8	SX_OB_20220302_23_54_SS_Primary_ALS	S	2/03/2022	23:54	Bucket	1	x	x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203824
Telephone : + 61-3-8549 9600

Received: 1445 3/3 Carrier: —
C/note:
Temp: 28.7°C Seal: Y [✓ N]
Ice / Icebricks: [✓ N]

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Hannah Kennedy	Date: 3/3/22	Name:	Date:	Con' Note No:
Of:	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved;
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

CERTIFICATE OF ANALYSIS

Work Order	: **EM2203825**	Page	: 1 of 15
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 05-Mar-2022 09:43
Order number	: ----	Date Analysis Commenced	: 07-Mar-2022
C-O-C number	: 20220305043124-ALS-21	Issue Date	: 10-Mar-2022 14:56
Sampler	: BRANDON CLARKE, LOUIS ROSE		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 8		
No. of samples analysed	: 8		

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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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.

- EG048G: EM2203691 #1 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	----
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	--------
				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	<0.01	<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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**----**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**--------**
				Result	Result	Result	Result	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**104**	**100**	**99.6**	**103**	----
13C8-PFOA	----	0.02	%	**104**	**110**	**111**	**103**	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	----
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-005**	**EM2203825-006**	**EM2203825-007**	**EM2203825-008**	--------
				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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	----
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	----
Compound	CAS Number	LOR	Unit	**EM2203825-005**	**EM2203825-006**	**EM2203825-007**	**EM2203825-008**	--------
				Result	Result	Result	Result	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
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	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----
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)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**90.6**	**88.2**	**93.6**	**96.2**	----
13C8-PFOA	----	0.02	%	**106**	**105**	**104**	**104**	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	SX_OB_20220304_12_16_SS_Primary	SX_OB_20220304_16_09_SS_Triplicate	SX_OB_20220304_16_17_SS_Primary	SX_OB_20220305_00_02_SS_Primary	SX_OB_20220304_12_16_SS_Primary
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**8.0**	**8.0**	**7.8**	**7.7**	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**33.2**	**33.4**	**33.9**	**35.1**	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**19**	**14**	**15**	**18**	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	5	mg/kg	**94**	**69**	**86**	**85**	----
Copper	7440-50-8	5	mg/kg	**65**	**59**	**51**	**57**	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	----
Nickel	7440-02-0	5	mg/kg	**152**	**182**	**129**	**155**	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	----
Tin	7440-31-5	10	mg/kg	<10	<10	<10	<10	----
Zinc	7440-66-6	5	mg/kg	**98**	**99**	**77**	**95**	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	**180**	**190**	**180**	**170**	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.4**	**9.2**	**9.1**	**8.8**	----
After HCl pH	----	0.1	pH Unit	**1.6**	**1.6**	**1.5**	**1.5**	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	**5.0**	----
Final pH	----	0.1	pH Unit	**5.1**	**5.1**	**5.1**	**5.1**	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	----	**9.5**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP074A: Monocyclic Aromatic Hydrocarbons								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_1216_SS_Primary**	**SX_OB_20220304_1609_SS_Triplicate**	**SX_OB_20220304_1617_SS_Primary**	**SX_OB_20220305_0002_SS_Primary**	**SX_OB_20220304_1216_SS_Primary**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
EP075A: Phenolic Compounds (Halogenated)								

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	SX_OB_20220304_12_16_SS_Primary	SX_OB_20220304_16_09_SS_Triplicate	SX_OB_20220304_16_17_SS_Primary	SX_OB_20220305_00_02_SS_Primary	SX_OB_20220304_12_16_SS_Primary
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	CAS Number	LOR	Unit	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg	<20	<20	<20	<20	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**SX_OB_20220304_12_16_SS_Primary**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**SX_OB_20220304_12_16_SS_Primary**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ **Chlordane**	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**SX_OB_20220304_12_16_SS_Primary**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_12_16_SS_Primary**	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**SX_OB_20220304_12_16_SS_Primary**
			Sampling date / time	04-Mar-2022 12:16	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	04-Mar-2022 12:16
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203825-001**	**EM2203825-002**	**EM2203825-003**	**EM2203825-004**	**EM2203825-005**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**103**	**99.8**	**99.2**	**99.5**	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**89.2**	**95.0**	**90.0**	**84.2**	----
Toluene-D8	2037-26-5	0.1	%	**88.7**	**93.5**	**89.7**	**81.4**	----
4-Bromofluorobenzene	460-00-4	0.1	%	**97.7**	**105**	**102**	**97.5**	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**81.4**	**79.1**	**78.1**	**73.0**	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**77.0**	**74.7**	**74.6**	**66.8**	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**84.2**	**80.8**	**79.2**	**78.2**	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**83.5**	**81.6**	**81.7**	**72.2**	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**74.4**	**73.8**	**74.0**	**64.2**	----
2-Fluorobiphenyl	321-60-8	0.025	%	**100**	**95.8**	**95.2**	**87.0**	----
Anthracene-d10	1719-06-8	0.025	%	**93.3**	**88.8**	**87.5**	**89.2**	----
4-Terphenyl-d14	1718-51-0	0.025	%	**95.1**	**90.7**	**90.0**	**94.5**	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**82.8**	**83.3**	**71.4**	**85.0**	----
13C8-PFOA	----	0.0002	%	**95.1**	**95.9**	**100**	**102**	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL)**			Sample ID	**SX_OB_20220304_16_09_SS_Triplicate**	**SX_OB_20220304_16_17_SS_Primary**	**SX_OB_20220305_00_02_SS_Primary**	**----**	**----**
			Sampling date / time	04-Mar-2022 16:00	04-Mar-2022 16:00	05-Mar-2022 00:02	----	----
Compound	CAS Number	LOR	Unit	**EM2203825-006**	**EM2203825-007**	**EM2203825-008**	**--------**	**--------**
				Result	Result	Result	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.8**	**9.5**	**9.5**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	CAS Number	Recovery Limits (%) Low	Recovery Limits (%) High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **DI WATER LEACHATE**

Compound	CAS Number	Recovery Limits (%) Low	Recovery Limits (%) High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	Recovery Limits (%) High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

Automated Guideline Comparison Report

Work Order	: **EM2203825**	Page	: 1 of 2
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: david.lawson@agonenviro.com.au	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: ----	Telephone	: +6138549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 05-Mar-2022 09:43
Order number	: ----	Date Analysed	: 07-Mar-2022
C-O-C number	: 20220305043124-ALS-21	Date Issued	: 10-Mar-2022 14:56
No. of samples received	: 8		
No. of samples analysed	: 8	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

General Comments

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

Summary of Thresholds Reached or Exceeded

Results for all samples detailed in this report are below the upper threshold limits for Fill Material.

Results for all samples detailed in this report are below the upper threshold limits for Fill Material.

Analytical Results

Sub-Matrix:			*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	----	----	----	----	----
			Sampling date/time			----	----	----	----	----
Compound	*Method*	*LOR*	*Unit*			MU	MU	MU	MU	MU
		-	-	----	----	----	----	----	----	----

ALS Environmental

QUALITY CONTROL REPORT

Work Order : **EM2203825**

Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : DAVID LAWSON
Address : D1.1 63-85 TURNER STREET
PORT MELBOURNE 3207
Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220305043124-ALS-21
Sampler : BRANDON CLARKE, LOUIS ROSE
Site : ----
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 8
No. of samples analysed : 8

Page : 1 of 25

Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +6138549 9600
Date Samples Received : 05-Mar-2022
Date Analysis Commenced : 07-Mar-2022
Issue Date : 10-Mar-2022

NATA
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*
Andrew Lu	VOC Section Supervisor	Melbourne Inorganics, Springvale, VIC
Andrew Lu	VOC Section Supervisor	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4213454)									
EM2203688-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	161	147	9.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	183	177	3.3	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	39	42	7.1	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	25	34	31.4	No Limit
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	85	98	14.2	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	155	156	0.0	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	18	17	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	57	69	18.6	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	95	110	15.0	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214763)									

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 (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4214763) - continued									
EM2203686-001	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.4	7.5	0.0	0% - 20%
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EA001: pH (CaCl2)	----	0.1	pH Unit	7.7	7.6	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4214302)									
EM2203691-002	Anonymous	EA055: Moisture Content	----	0.1	%	15.8	16.9	7.1	0% - 50%
EM2203906-001	Anonymous	EA055: Moisture Content	----	0.1	%	16.0	19.0	17.1	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4213455)									
EM2203688-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4213478)									
EM2203688-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	1.5	1.0	36.8	No Limit
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4214655)									
EM2203688-003	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4213486)									
EM2203688-003	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	140	120	10.8	No Limit
EM2203825-004	SX_OB_20220305_00_02_SS_Primary	EK040T: Fluoride	16984-48-8	40	mg/kg	170	180	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4213436)									
EM2203688-003	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203906-005	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4211449)									
EM2203824-001	Anonymous	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4211449)									
EM2203824-001	Anonymous	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4211449)									
EM2203824-001	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	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 (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4211449) - continued									
EM2203824-001	Anonymous	EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4213437)									
EM2203688-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203906-005	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4213437)									
EM2203688-003	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	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 (%)
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4213437) - continued									
EM2203688-003	Anonymous	EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203906-005	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213437)									
EM2203688-003	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203906-005	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	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 (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4213437) - continued									
EM2203906-005	Anonymous	EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4213437)									
EM2203688-003	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203906-005	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4213437) - continued									
EM2203906-005	Anonymous	EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4211449)									
EM2203824-001	Anonymous	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4213438)									
EM2203688-003	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203906-005	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	260	270	4.3	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	280	310	11.1	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	80	80	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	620	660	6.2	0% - 50%
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4211449)									
EM2203824-001	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4213438)									
EM2203688-003	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203906-005	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	420	460	10.3	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	100	120	18.2	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	110	90	14.9	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	630	670	6.2	0% - 50%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4215264)									
EM2203610-001	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	<0.0002	<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: 4215264) - continued									
EM2203610-001	Anonymous	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203741-007	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4215264)									
EM2203610-001	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	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203741-007	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4215264)									
EM2203610-001	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

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: 4215264) - continued									
EM2203610-001	Anonymous	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
EM2203741-007	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4215264)									
EM2203610-001	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
EM2203741-007	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
EP231P: PFAS Sums (QC Lot: 4215264)									
EM2203610-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	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 (%)*
EP231P: PFAS Sums (QC Lot: 4215264) - continued									
EM2203741-007	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	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: 4216187)									
EM2203598-005	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.02	0.02	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2203825-008	SX_OB_20220305_00_02_SS_Primary	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: 4216285)									
EM2203824-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<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: 4216187)									
EM2203598-005	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

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: 4216187) - continued									
EM2203825-008	SX_OB_20220305_00_02_SS_Primary	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: 4216285)									
EM2203824-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4216187)									
EM2203598-005	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
EM2203825-008	SX_OB_20220305_00_02_SS_Primary	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	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: 4216187) - continued									
EM2203825-008	SX_OB_20220305_00_02_SS_Primary	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4216285)									
EM2203824-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	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: 4216187)									
EM2203598-005	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
EM2203825-008	SX_OB_20220305_00_02_SS_Primary	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: 4216187) - continued									
EM2203825-008	SX_OB_20220305_00_02_ SS_Primary	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: 4216285)									
EM2203824-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4216187)									
EM2203598-005	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.02	0.02	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.02	0.02	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	0.02	0.02	0.0	No Limit
EM2203825-008	SX_OB_20220305_00_02_ SS_Primary	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4216285)									
EM2203824-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	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*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213454)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	107	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	71.8	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	115	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	109	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	106	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	85.1	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	108	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	82.2	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	119	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	82.0	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4212943)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4214763)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	100 101	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213455)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	90.6	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4213478)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	83.1	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214655)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	90.8	70.0	130
EK040T: Fluoride Total (QCLot: 4213486)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	75.9	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213436)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	135	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	85.6	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	95.0	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	95.4	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	92.3	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	93.0	69.4	111

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*
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449) - continued								
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	93.4	68.4	110
EP074H: Naphthalene (QCLot: 4211449)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	94.6	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4211449)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	90.2	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	85.5	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	83.8	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	88.6	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	87.4	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	88.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	87.4	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	86.1	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	88.2	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	96.4	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	89.8	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	93.0	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	74.6	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	91.2	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	84.2	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	83.3	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	85.4	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213437)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	89.6	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	93.6	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	94.2	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	94.5	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	108	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	105	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	102	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	108	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	87.9	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213437)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	90.5	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	92.1	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	93.9	74.3	129

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*
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213437) - continued								
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	91.5	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	91.0	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	84.6	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	114	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	118	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	96.0	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	95.7	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213437)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	92.6	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	105	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	107	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	109	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	99.7	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	99.7	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	98.7	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	100	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	101	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	103	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	103	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	101	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	101	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	102	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	101	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4213437)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	98.8	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	98.4	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	99.5	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	99.6	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	101	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	98.2	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	99.4	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	96.0	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	99.4	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	99.8	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	102	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	102	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	104	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	95.9	69.0	143

Sub-Matrix: **SOIL**

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*
EP075I: Organochlorine Pesticides (QCLot: 4213437) - continued								
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	115	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	102	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	101	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	104	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	99.5	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	106	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4211449)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	111	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213438)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	89.2	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.3	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	90.1	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	89.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4211449)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	110	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213438)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	88.1	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	90.5	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	92.7	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	90.1	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4215264)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	94.4	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	76.9	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	94.3	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	74.6	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	79.7	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	81.6	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4215264)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	78.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.7	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.9	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.1	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.0	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	121	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.1	64.0	136

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	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4215264) - continued								
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	114	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	109	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	69.8	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4215264)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	71.7	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	# 136	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	116	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	123	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	105	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.7	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4215264)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	96.4	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	88.7	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	112	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	79.2	70.0	130
EP231P: PFAS Sums (QCLot: 4215264)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	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	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216187)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	86.1	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	89.7	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	87.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	83.1	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	91.0	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	81.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216285)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	100	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	87.9	71.0	127

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: 4216285) - continued								
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	94.1	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	98.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	93.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216187)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	93.8	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	94.9	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	88.9	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	91.7	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	88.9	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	92.7	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	84.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	82.1	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	98.2	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	83.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	94.1	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216285)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	92.1	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	95.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.3	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	93.7	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.2	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	99.5	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	97.5	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216187)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	95.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	101	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	101	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	91.5	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	99.6	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	93.3	65.0	136

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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216187) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	87.7	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	94.4	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	110	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
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	93.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216187)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	99.5	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	101	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	92.9	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	77.4	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216285)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	97.9	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	83.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	106	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	93.7	70.0	130
EP231P: PFAS Sums (QCLot: 4216187)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4216285)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	*SpikeRecovery(%)*	*Acceptable Limits (%)*	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4213454)							
EM2203691-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	80.6	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.5	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	86.4	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	97.6	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	94.4	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	98.1	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	88.5	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4213455)							
EM2203691-001	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	97.0	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4213478)							
EM2203691-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 12.6	58.0	114
EM2203691-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 5.4	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4214655)							
EM2203691-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	114	70.0	130
EK040T: Fluoride Total (QCLot: 4213486)							
EM2203691-001	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	70.0	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4213436)							
EM2203691-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	119	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4211449)							
EM2203824-002	Anonymous	EP074-UT: Benzene	71-43-2	2 mg/kg	80.1	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	76.5	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4211449)							
EM2203824-002	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	73.5	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	70.4	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	68.8	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4213437)							
EM2203691-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	84.0	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	92.0	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	58.9	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4213437)							
EM2203691-002	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	83.5	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	83.4	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4213437)							
EM2203691-002	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	75.4	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	88.4	37.8	152

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4211449)							
EM2203824-002	Anonymous	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	78.6	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4213438)							
EM2203691-003	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	87.3	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	88.6	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	89.3	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	88.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4211449)							
EM2203824-002	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	77.2	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4213438)							
EM2203691-003	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	86.9	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	89.8	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	89.9	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	89.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4215264)							
EM2203610-006	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	97.2	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	73.1	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	118	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	71.9	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	78.3	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	85.2	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4215264)							
EM2203610-006	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	82.3	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	90.2	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	104	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	79.0	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	102	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	85.9	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	122	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	93.0	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	121	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	111	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	69.2	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4215264)							
EM2203610-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	67.1	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	125	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	119	70.0	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: 4215264) - continued							
EM2203610-006	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	111	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	95.2	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	121	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4215264)							
EM2203610-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	93.9	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	103	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	102	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	77.3	70.0	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: 4216187)							
EM2203598-006	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	104	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	91.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	95.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	92.8	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	115	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	88.4	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4216285)							
EM2203824-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	103	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	85.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	92.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.0	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	83.1	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216187)							
EM2203598-006	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	107	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	114	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	107	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	105	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	104	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	104	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	96.4	71.0	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: 4216187) - continued							
EM2203598-006	Anonymous	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	92.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	101	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	79.5	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	90.7	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4216285)							
EM2203824-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	95.4	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	97.1	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	96.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	102	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	101	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	92.8	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	107	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	102	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	104	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216187)							
EM2203598-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	103	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	115	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	113	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	101	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	96.8	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	107	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	120	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285)							
EM2203824-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.2	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	112	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	110	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	110	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4216285) - continued							
EM2203824-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	95.7	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	104	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216187)							
EM2203598-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	103	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	125	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	106	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	71.2	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4216285)							
EM2203824-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	100.0	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	101	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	105	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	85.3	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203825**	Page	: 1 of 12
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 05-Mar-2022
Site	: ----	Issue Date	: 10-Mar-2022
Sampler	: BRANDON CLARKE, LOUIS ROSE	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 8

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.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	**Analyte**	CAS Number	Data	Limits	**Comment**
Laboratory Control Spike (LCS) Recoveries							
EP231C: Perfluoroalkyl Sulfonamides	QC-4215264-001	----	**N-Methyl perfluorooctane sulfonamide (MeFOSA)**	31506-32-8	136 %	70.0-130%	**Recovery greater than upper control limit**
Matrix Spike (MS) Recoveries							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203691--001	Anonymous	**Hexavalent Chromium**	18540-29-9	12.6 %	58.0-114%	**Recovery less than lower data quality objective**
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203691--001	Anonymous	**Hexavalent Chromium**	18540-29-9	5.4 %	58.0-114%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**09-Mar-2022**	12-Mar-2022	✓	**09-Mar-2022**	09-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**----**	----	----	**08-Mar-2022**	18-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**----**	----	----	**08-Mar-2022**	19-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**09-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	31-Aug-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**09-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	31-Aug-2022	✓

Matrix: **SOIL**

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

Method ***Container** / Client Sample ID(s)*	***Sample Date***	*Extraction / Preparation* ***Date extracted***	 *Due for extraction*	 *Evaluation*	*Analysis* ***Date analysed***	 *Due for analysis*	 *Evaluation*
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**09-Mar-2022**	01-Apr-2022	✓	**09-Mar-2022**	01-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**09-Mar-2022**	02-Apr-2022	✓	**09-Mar-2022**	02-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	01-Apr-2022	✓	**09-Mar-2022**	15-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	02-Apr-2022	✓	**09-Mar-2022**	15-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	22-Mar-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**09-Mar-2022**	22-Mar-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	01-Apr-2022	✓	**10-Mar-2022**	01-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	02-Apr-2022	✓	**10-Mar-2022**	02-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	31-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	31-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	31-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	31-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓

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*
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	11-Mar-2022	✓	**07-Mar-2022**	11-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	12-Mar-2022	✓	**07-Mar-2022**	12-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	11-Mar-2022	✓	**07-Mar-2022**	11-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	12-Mar-2022	✓	**07-Mar-2022**	12-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	11-Mar-2022	✓	**07-Mar-2022**	11-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	12-Mar-2022	✓	**07-Mar-2022**	12-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓

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*
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	11-Mar-2022	✓	**07-Mar-2022**	11-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	12-Mar-2022	✓	**07-Mar-2022**	12-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**07-Mar-2022**	11-Mar-2022	✓	**07-Mar-2022**	11-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	18-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**07-Mar-2022**	12-Mar-2022	✓	**07-Mar-2022**	12-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	19-Mar-2022	✓	**08-Mar-2022**	17-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓

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) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary	**04-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220305_00_02_SS_Primary	**05-Mar-2022**	**08-Mar-2022**	31-Aug-2022	✓	**09-Mar-2022**	17-Apr-2022	✓

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) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary, SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary	**07-Mar-2022**	**09-Mar-2022**	03-Sep-2022	✓	**09-Mar-2022**	03-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary, SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary	**07-Mar-2022**	**09-Mar-2022**	03-Sep-2022	✓	**09-Mar-2022**	03-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary, SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary	**07-Mar-2022**	**09-Mar-2022**	03-Sep-2022	✓	**09-Mar-2022**	03-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary, SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary	**07-Mar-2022**	**09-Mar-2022**	03-Sep-2022	✓	**09-Mar-2022**	03-Sep-2022	✓

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) SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary, SX_OB_20220304_12_16_SS_Primary, SX_OB_20220304_16_09_SS_Triplicate, SX_OB_20220304_16_17_SS_Primary, SX_OB_20220305_00_02_SS_Primary	**07-Mar-2022**	**09-Mar-2022**	03-Sep-2022	✓	**09-Mar-2022**	03-Sep-2022	✓

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

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*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**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	3	19	**15.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	19	**10.53**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	19	**10.53**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	19	**10.53**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	*Method*	*Matrix*	*Method Descriptions*
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220305043124-ALS-21_solid_00
P.O. NO.:
RESULTS REQUIRED (Date): 3 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: Brandon Clarke - AGON Louis Rose EP Risk
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY:
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes:

URGENT

Environmental Division
Melbourne
Work Order Reference
EM2203825

Telephone : + 61-3-8549 9600

	SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
	ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
5	1	SX_OB_20220304_12_16_SS_Primary_ALS	S	4/03/2022	12:16	Bucket	1	x	x	x	x	x
6	2	SX_OB_20220304_16_09_SS_Triplicate_ALS	S	4/03/2022	16:00	Bucket	1	x	x	x	x	x
7	3	SX_OB_20220304_16_17_SS_Primary_ALS	S	4/03/2022	16:00	Bucket	1	x	x	x	x	x
8	4	SX_OB_20220305_00_02_SS_Primary_ALS	S	5/03/2022	0:02	Bucket	1	x	x	x	x	x

RELINQUISHED BY:
Name:
Of:
Date:
Time:
Name:
Of:
Date:
Time:

RECEIVED BY
Name: Scott
Of: ALS
Date: 5/3/22
Time: 9:43
Name:
Of:
Date:
Time:

METHOD OF SHIPMENT
Con' Note No:
Transport Co:

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

CERTIFICATE OF ANALYSIS

Work Order	: **EM2203882**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 04-Mar-2022 13:15
Order number	: ----	Date Analysis Commenced	: 08-Mar-2022
C-O-C number	: 20220304085857-ALS-14	Issue Date	: 11-Mar-2022 16:28
Sampler	: BRANDON CLARKE		
Site	:		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 Contact 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: Poor matrix spike recovery for sample EM2203625-008 due to sample matrix interference.
- EG048G: EM2203809 #27 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- EG048G: EM2203907 #1 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- 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. 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 (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				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: **ASLP LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220303_1223_SS_Primary_ALS**	**SX_OB_20220303_1624_SS_Primary_ALS**	**SX_OB_20220303_1619_SS_Triplicate_ALS**	**SX_OB_20220303_2012_SS_Primary_ALS**	**SX_OB_20220304_0002_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	CAS Number	LOR	Unit	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				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	%	**100**	**100**	**99.7**	**101**	**96.4**
13C8-PFOA	----	0.02	%	**105**	**108**	**109**	**107**	**108**

Analytical Results

Sub-Matrix: **ASLP LEACHATE**
(Matrix: **WATER**)

			Sample ID	SX_OB_20220304_04_02_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Duplicate_ALS	----	----
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	--------	--------
				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: **ASLP LEACHATE** (Matrix: **WATER**)			*Sample ID*	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	----	----
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	--------	--------
				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	%	**98.8**	**97.4**	**94.6**	----	----
13C8-PFOA	----	0.02	%	**103**	**106**	**112**	----	----

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220303_1223_SS_Primary_ALS**	**SX_OB_20220303_1624_SS_Primary_ALS**	**SX_OB_20220303_1619_SS_Triplicate_ALS**	**SX_OB_20220303_2012_SS_Primary_ALS**	**SX_OB_20220304_0002_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 00:00	03-Mar-2022 00:00	03-Mar-2022 00:00	03-Mar-2022 00:00	04-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	**EM2203882-009**	**EM2203882-010**	**EM2203882-011**	**EM2203882-012**	**EM2203882-013**
				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: **DI WATER LEACHATE**
(Matrix: **WATER**)

			Sample ID	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 00:00	03-Mar-2022 00:00	03-Mar-2022 00:00	03-Mar-2022 00:00	04-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-009**	**EM2203882-010**	**EM2203882-011**	**EM2203882-012**	**EM2203882-013**
				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	%	**92.2**	**92.1**	**92.5**	**97.6**	**109**
13C8-PFOA	----	0.02	%	**108**	**104**	**102**	**103**	**108**

Analytical Results

Sub-Matrix: **DI WATER LEACHATE** (Matrix: **WATER)**			Sample ID	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	----	----
			Sampling date / time	04-Mar-2022 00:00	04-Mar-2022 00:00	04-Mar-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	**EM2203882-014**	**EM2203882-015**	**EM2203882-016**	--------	--------
				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: **DI WATER LEACHATE** (Matrix: **WATER**)			Sample ID	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	**----**	**----**
			Sampling date / time	04-Mar-2022 00:00	04-Mar-2022 00:00	04-Mar-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	**EM2203882-014**	**EM2203882-015**	**EM2203882-016**	**--------**	**--------**
				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	%	**96.1**	**99.5**	**99.5**	----	----
13C8-PFOA	----	0.02	%	**103**	**105**	**105**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**7.7**	**8.1**	**7.7**	**8.2**	**7.8**
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**30.3**	**33.3**	**30.9**	**32.3**	**31.6**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**17**	**25**	**11**	**24**	**20**
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**94**	**100**	**55**	**100**	**101**
Copper	7440-50-8	5	mg/kg	**57**	**50**	**30**	**53**	**56**
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	2	mg/kg	<2	<2	<2	<2	<2
Nickel	7440-02-0	2	mg/kg	**150**	**149**	**76**	**146**	**146**
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	<2
Tin	7440-31-5	5	mg/kg	<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg	**91**	**88**	**49**	**95**	**93**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	**1.1**	**0.5**	**0.5**	**0.6**
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	1	mg/kg	<1	<1	<1	<1	<1
EK040T: Fluoride Total								
Fluoride	16984-48-8	40	mg/kg	**180**	**170**	**190**	**150**	**170**
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.2**	**9.1**	**9.1**	**9.1**	**9.4**
After HCl pH	----	0.1	pH Unit	**1.7**	**1.7**	**1.6**	**1.6**	**1.6**
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Final pH	----	0.1	pH Unit	**5.2**	**5.2**	**5.1**	**5.2**	**5.2**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220303_1223_SS_Primary_ALS**	**SX_OB_20220303_1624_SS_Primary_ALS**	**SX_OB_20220303_1619_SS_Triplicate_ALS**	**SX_OB_20220303_2012_SS_Primary_ALS**	**SX_OB_20220304_0002_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
^ **Sum of volatile chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
^ **Sum of other chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
EP075A: Phenolic Compounds (Halogenated)								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220303_1223_SS_Primary_ALS**	**SX_OB_20220303_1624_SS_Primary_ALS**	**SX_OB_20220303_1619_SS_Triplicate_ALS**	**SX_OB_20220303_2012_SS_Primary_ALS**	**SX_OB_20220304_0002_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Phenols (halogenated)**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	5	mg/kg	<5	<5	<5	<5	<5
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	<5	<5	<5
^ **Sum of Phenols (non-halogenated)**	----	1	mg/kg	<1	<1	<1	<1	<1
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
^ **Sum of organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ **Chlordane**	57-74-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<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

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			Sample ID	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	CAS Number	LOR	Unit	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 12:23	03-Mar-2022 16:24	03-Mar-2022 16:19	03-Mar-2022 20:20	04-Mar-2022 00:02
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-001**	**EM2203882-002**	**EM2203882-003**	**EM2203882-004**	**EM2203882-005**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**111**	**116**	**112**	**104**	**120**
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**91.1**	**86.5**	**63.2**	**78.0**	**78.1**
Toluene-D8	2037-26-5	0.1	%	**88.1**	**83.9**	**61.0**	**85.2**	**78.6**
4-Bromofluorobenzene	460-00-4	0.1	%	**103**	**98.1**	**76.3**	**86.2**	**93.7**
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**90.0**	**96.3**	**90.4**	**86.2**	**104**
2-Chlorophenol-D4	93951-73-6	0.025	%	**84.9**	**90.3**	**84.6**	**81.0**	**98.2**
2.4.6-Tribromophenol	118-79-6	0.025	%	**83.4**	**88.7**	**88.4**	**80.3**	**96.0**
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**90.6**	**90.1**	**86.7**	**82.1**	**104**
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**79.9**	**84.3**	**78.0**	**75.4**	**92.6**
2-Fluorobiphenyl	321-60-8	0.025	%	**101**	**104**	**102**	**93.8**	**115**
Anthracene-d10	1719-06-8	0.025	%	**92.6**	**97.0**	**93.5**	**88.7**	**102**
4-Terphenyl-d14	1718-51-0	0.025	%	**97.8**	**110**	**97.6**	**94.5**	**105**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**74.8**	**76.6**	**78.5**	**78.2**	**74.0**
13C8-PFOA	----	0.0002	%	**102**	**97.2**	**103**	**106**	**101**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	**8.0**	**7.8**	**7.8**	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**31.0**	**28.4**	**31.8**	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**21**	**20**	**21**	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	**90**	**98**	**105**	----	----
Copper	7440-50-8	5	mg/kg	**59**	**54**	**63**	----	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	----	----
Molybdenum	7439-98-7	2	mg/kg	<2	<2	<2	----	----
Nickel	7440-02-0	2	mg/kg	**161**	**142**	**163**	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	----	----
Tin	7440-31-5	5	mg/kg	<5	<5	<5	----	----
Zinc	7440-66-6	5	mg/kg	**102**	**90**	**106**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	**0.9**	**0.5**	**0.6**	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	1	mg/kg	<1	<1	<1	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	40	mg/kg	**160**	**190**	**170**	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.4**	**9.2**	**9.3**	----	----
After HCl pH	----	0.1	pH Unit	**1.6**	**1.6**	**1.6**	----	----
Extraction Fluid pH	----	0.1	pH Unit	**5.0**	**5.0**	**5.0**	----	----
Final pH	----	0.1	pH Unit	**5.2**	**5.2**	**5.1**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	**7.6**	**9.5**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL)**

			Sample ID	**SX_OB_20220304_0402_SS_Primary_ALS**	**SX_OB_20220304_0822_SS_Primary_ALS**	**SX_OB_20220304_0822_SS_Duplicate_ALS**	**SX_OB_20220303_1223_SS_Primary_ALS**	**SX_OB_20220303_1624_SS_Primary_ALS**
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	<0.4	----	----
trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	<0.04	----	----
Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	<0.02	----	----
1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	<0.01	----	----
^ **Sum of other chlorinated hydrocarbons**	----	0.01	mg/kg	<0.01	<0.01	<0.01	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ **Sum of Phenols (halogenated)**	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	----	----
Dinoseb	88-85-7	5	mg/kg	<5	<5	<5	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	<5	----	----
^ **Sum of Phenols (non-halogenated)**	----	1	mg/kg	<1	<1	<1	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	SX_OB_20220304_04_02_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Duplicate_ALS	SX_OB_20220303_12_23_SS_Primary_ALS	SX_OB_20220303_16_24_SS_Primary_ALS
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
^ **Sum of organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			Sample ID	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ **Chlordane**	57-74-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_OB_20220304_04_02_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Primary_ALS	SX_OB_20220304_08_22_SS_Duplicate_ALS	SX_OB_20220303_12_23_SS_Primary_ALS	SX_OB_20220303_16_24_SS_Primary_ALS
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2203882-006	EM2203882-007	EM2203882-008	EM2203882-009	EM2203882-010
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<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	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	**SX_OB_20220303_12_23_SS_Primary_ALS**	**SX_OB_20220303_16_24_SS_Primary_ALS**
			Sampling date / time	04-Mar-2022 04:04	04-Mar-2022 08:22	04-Mar-2022 08:22	03-Mar-2022 00:00	03-Mar-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-006**	**EM2203882-007**	**EM2203882-008**	**EM2203882-009**	**EM2203882-010**
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<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	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<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	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**118**	**102**	**101**	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**70.9**	**87.2**	**95.9**	----	----
Toluene-D8	2037-26-5	0.1	%	**71.9**	**90.4**	**100**	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	**83.8**	**98.6**	**112**	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	**106**	**82.5**	**81.9**	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	**99.0**	**77.3**	**76.8**	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%	**99.0**	**74.4**	**75.1**	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	**98.4**	**83.4**	**81.4**	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%	**91.6**	**72.4**	**72.6**	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	**118**	**94.9**	**91.9**	----	----
Anthracene-d10	1719-06-8	0.025	%	**107**	**86.1**	**85.4**	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	**104**	**90.9**	**90.8**	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	**93.4**	**75.9**	**82.8**	----	----
13C8-PFOA	----	0.0002	%	**99.0**	**95.0**	**101**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

			Sample ID	**SX_OB_20220303_16_19_SS_Triplicate_ALS**	**SX_OB_20220303_20_12_SS_Primary_ALS**	**SX_OB_20220304_00_02_SS_Primary_ALS**	**SX_OB_20220304_04_02_SS_Primary_ALS**	**SX_OB_20220304_08_22_SS_Primary_ALS**
			Sampling date / time	03-Mar-2022 00:00	03-Mar-2022 00:00	04-Mar-2022 00:00	04-Mar-2022 00:00	04-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	**EM2203882-011**	**EM2203882-012**	**EM2203882-013**	**EM2203882-014**	**EM2203882-015**
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.6**	**9.7**	**9.7**	**9.7**	**9.6**

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			*Sample ID*	**SX_OB_20220304_08_22_SS_Duplicate_ALS**	----	----	----	----
			Sampling date / time	04-Mar-2022 00:00	----	----	----	----
Compound	*CAS Number*	*LOR*	*Unit*	**EM2203882-016**	--------	--------	--------	--------
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.6**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **ASLP LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **DI WATER LEACHATE**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: **SOIL**

Compound	*CAS Number*	*Recovery Limits (%)* Low	*Recovery Limits (%)* High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

QUALITY CONTROL REPORT

Work Order	: **EM2203882**	Page	: 1 of 28
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 04-Mar-2022
Order number	: ----	Date Analysis Commenced	: 08-Mar-2022
C-O-C number	: 20220304085857-ALS-14	Issue Date	: 11-Mar-2022
Sampler	: BRANDON CLARKE		
Site	:		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

NATA

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*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4216182)									
EM2203704-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	46	51	9.1	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	22	28	22.2	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	6	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	14	16	11.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	14	15	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	16	16	0.0	No Limit
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	94	98	4.4	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	150	142	5.8	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	17	17	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	57	56	0.0	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	91	93	1.6	0% - 50%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4216183)									

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 (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4216183) - continued									
EM2203935-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	31	33	5.9	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	22	22	0.0	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	11	12.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	11	10	0.0	No Limit
EM2203964-004	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	67	66	0.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	78	78	0.0	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	26	26	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	31	34	8.6	No Limit
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4218363)									
EM2203707-003	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EM2203870-002	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	5.4	5.6	4.2	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4218364)									
EM2203882-003	SX_OB_20220303_16_19_SS_Triplicate_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.7	7.7	0.0	0% - 20%
EM2203908-002	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.0	7.0	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4216332)									
EM2203880-002	Anonymous	EA055: Moisture Content	----	0.1	%	2.9	3.1	6.3	No Limit
EM2203882-003	SX_OB_20220303_16_19_SS_Triplicate_ALS	EA055: Moisture Content	----	0.1	%	30.9	31.1	0.8	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4216181)									
EM2203704-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4216149)									
EM2203809-026	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	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 (%)*
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4216149) - continued									
EM2203861-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4216150)									
EM2203882-008	SX_OB_20220304_08_22_SS_Duplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	0.6	0.5	0.0	No Limit
EM2203910-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4217199)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2203726-009	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4216134)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	180	170	0.0	No Limit
EM2203907-008	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	110	100	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4216082)									
EM2203707-003	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4214438)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4214438)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4214438)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	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 (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4214438) - continued									
EM2203882-001	SX_OB_20220303_12_23_ SS_Primary_ALS	EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4216080)									
EM2203707-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_ SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4216080)									
EM2203707-003	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	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 (%)
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4216080) - continued									
EM2203707-003	Anonymous	EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4216080)									
EM2203707-003	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	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 (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4216080) - continued									
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4216080)									
EM2203707-003	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	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 (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4216080) - continued									
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4214438)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4216081)									
EM2203707-003	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4214438)									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4216081)									
EM2203707-003	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	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 (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4216081) - continued									
EM2203882-006	SX_OB_20220304_04_02_SS_Primary_ALS	EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4217060)									
EM2203476-001	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	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4217060)									
EM2203476-001	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	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit

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: 4217060)									
EM2203476-001	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
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4217060)									
EM2203476-001	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
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	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

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: 4217060) - continued									
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	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
EP231P: PFAS Sums (QC Lot: 4217060)									
EM2203476-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2203882-001	SX_OB_20220303_12_23_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	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: 4219766)									
EM2203625-005	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
EM2204050-004	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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4219773)									
EM2203476-011	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
EM2203882-014	SX_OB_20220304_04_02_SS_Primary_ALS	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

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: 4219773) - continued									
EM2203882-014	SX_OB_20220304_04_02_SS_Primary_ALS	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: 4219766)									
EM2203625-005	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
EM2204050-004	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4219773)									
EM2203476-011	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

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: 4219773) - continued									
EM2203882-014	SX_OB_20220304_04_02_ SS_Primary_ALS	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: 4219766)									
EM2203625-005	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
EM2204050-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4219773)									
EM2203476-011	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4219773) - continued									
EM2203476-011	Anonymous	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
EM2203882-014	SX_OB_20220304_04_02_SS_Primary_ALS	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: 4219766)									
EM2203625-005	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
EM2204050-004	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4219766) - continued									
EM2204050-004	Anonymous	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4219773)									
EM2203476-011	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
EM2203882-014	SX_OB_20220304_04_02_SS_Primary_ALS	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: 4219766)									
EM2203625-005	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2204050-004	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4219773)									
EM2203476-011	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2203882-014	SX_OB_20220304_04_02_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	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*
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4216182)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	94.7	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	53.7	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	98.7	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	88.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	89.1	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	77.6	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	92.8	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	76.1	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	91.2	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	71.3	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4216183)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	97.9	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	52.9	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	102	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	91.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	92.1	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	81.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	96.0	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	78.3	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	91.4	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	73.4	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4217280)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.6	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4218363)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	101 100	98.8 99.3	101 101
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4218364)								
EA001: pH (CaCl2)	----	----	pH Unit	---- ----	4 pH Unit 7 pH Unit	101 101	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4216181)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	85.9	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4216149)								

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
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4216149) - continued								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	84.0	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4216150)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	79.8	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4217199)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	115	70.0	130
EK040T: Fluoride Total (QCLot: 4216134)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	95.1	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4216082)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	124	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4214438)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	91.4	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	81.0	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	81.8	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	81.2	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	82.7	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	80.5	68.4	110
EP074H: Naphthalene (QCLot: 4214438)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	96.7	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4214438)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	79.5	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	88.4	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	89.8	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	88.2	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	89.4	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	88.7	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	86.7	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	88.8	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	88.4	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	86.1	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	89.9	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	80.1	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	84.3	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	88.2	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	92.4	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	84.2	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	103	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	101	70.8	110

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*
EP074I: Volatile Halogenated Compounds (QCLot: 4214438) - continued								
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	100	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4216080)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	101	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	98.0	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	97.1	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	93.7	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	109	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	106	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	109	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	4 mg/kg	107	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	86.9	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4216080)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	102	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	95.4	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	101	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	95.5	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	100	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	73.1	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	113	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	110	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	93.3	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	74.1	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4216080)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	98.2	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	112	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	112	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	116	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	105	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	104	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	108	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	107	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	106	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	108	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	108	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	108	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	109	72.1	134

Sub-Matrix: **SOIL**

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
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4216080) - continued								
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	109	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	109	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4216080)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	102	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	98.4	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	108	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	104	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	106	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	104	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	103	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	103	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	103	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	102	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	106	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	95.4	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	96.6	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	96.5	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	98.8	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	101	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	98.7	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	107	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	105	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	112	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4214438)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	93.3	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4216081)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	88.5	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	88.0	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	88.3	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	88.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4214438)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	91.1	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4216081)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	87.1	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	87.4	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	89.0	73.3	136

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*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4216081) - continued								
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	87.6	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217060)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	94.0	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	77.2	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	91.5	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	78.3	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	82.8	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	71.0	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217060)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	74.1	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.3	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	77.3	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.3	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.8	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	130	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.7	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	130	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	126	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	71.0	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217060)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	69.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	129	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	126	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	126	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	124	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.7	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4217060)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	98.8	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	102	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	132	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	90.5	70.0	130
EP231P: PFAS Sums (QCLot: 4217060)								

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*
EP231P: PFAS Sums (QCLot: 4217060) - continued								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

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: 4219766)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	112	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	88.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	93.4	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	97.3	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	94.8	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	102	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4219773)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	106	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	93.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.0	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	98.5	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	96.1	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	104	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4219766)								
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	99.8	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	96.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	98.0	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	86.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.3	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4219773)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	101	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	97.3	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	130

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*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4219773) - continued								
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	101	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	91.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	91.6	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	88.5	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	98.5	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4219766)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.8	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	119	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	115	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	112	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	105	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	107	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	95.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4219773)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	95.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	107	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	95.3	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	98.4	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	94.8	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4219766)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	97.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	109	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	108	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	89.9	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4219773)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	103	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	112	64.0	140

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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4219773) - continued								
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	111	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	85.3	70.0	130
EP231P: PFAS Sums (QCLot: 4219766)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4219773)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4216182)							
EM2203704-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	81.8	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.1	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	86.5	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	94.7	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	92.5	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	96.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	89.4	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4216183)							
EM2203935-007	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	98.6	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.0	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	94.3	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	98.6	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	97.4	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	90.7	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	82.0	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4216181)							
EM2203704-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	90.9	76.0	116

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4216149)							
EM2203809-027	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 3.5	58.0	114
EM2203809-027	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 1.4	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4216150)							
EM2203907-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 0.7	58.0	114
EM2203907-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 2.3	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4217199)							
EM2203726-005	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	108	70.0	130
EK040T: Fluoride Total (QCLot: 4216134)							
EM2203882-002	SX_OB_20220303_16_24_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	96.8	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4216082)							
EM2203707-056	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	134	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4214438)							
EM2203882-002	SX_OB_20220303_16_24_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	79.6	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	70.4	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4214438)							
EM2203882-002	SX_OB_20220303_16_24_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	69.3	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	71.5	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	67.6	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4216080)							
EM2203707-022	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	98.2	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	91.4	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	74.5	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4216080)							
EM2203707-022	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	98.4	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	90.5	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4216080)							
EM2203707-022	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	103	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	150	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4214438)							
EM2203882-002	SX_OB_20220303_16_24_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	79.0	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4216081)							
EM2203707-034	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	89.3	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	87.9	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	88.0	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	88.0	70.0	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*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4214438)							
EM2203882-002	SX_OB_20220303_16_24_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	77.8	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4216081)							
EM2203707-034	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	87.6	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	87.2	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	88.6	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	87.2	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4217060)							
EM2203476-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	97.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	# 72.3	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	109	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	79.5	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	71.8	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	86.2	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4217060)							
EM2203476-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	88.9	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	92.1	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	108	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	81.6	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	106	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	82.0	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	125	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	93.8	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	135	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	132	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	74.8	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4217060)							
EM2203476-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	67.5	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	124	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	129	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	123	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	118	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	82.5	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	105	61.0	139

Sub-Matrix: **SOIL**

				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: 4217060)							
EM2203476-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	110	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	106	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	133	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	75.6	70.0	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: 4219766)							
EM2203625-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	104	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	108	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	96.1	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	95.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4219773)							
EM2203625-008	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	112	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	112	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	105	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	98.2	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	71.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4219766)							
EM2203625-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	86.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	105	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	99.5	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	106	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	104	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	102	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	104	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	96.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	111	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	95.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	109	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4219773)							
EM2203625-008	Anonymous	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	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	101	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	104	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: 4219773) - continued							
EM2203625-008	Anonymous	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	106	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	96.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	105	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	102	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	80.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	112	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4219766)							
EM2203625-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	105	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	92.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	94.9	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	105	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	105	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	97.5	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4219773)							
EM2203625-008	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	115	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	108	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	111	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	112	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	91.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4219766)							
EM2203625-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	97.8	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	110	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	105	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	81.5	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low	High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4219773)							
EM2203625-008	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	99.3	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	110	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	104	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 55.5	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2203882**	Page	: 1 of 13
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 04-Mar-2022
Site	:	Issue Date	: 11-Mar-2022
Sampler	: BRANDON CLARKE	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

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, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203809--027	Anonymous	**Hexavalent Chromium**	18540-29-9	3.5 %	58.0-114%	**Recovery less than lower data quality objective**
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203907--001	Anonymous	**Hexavalent Chromium**	18540-29-9	0.7 %	58.0-114%	**Recovery less than lower data quality objective**
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203809--027	Anonymous	**Hexavalent Chromium**	18540-29-9	1.4 %	58.0-114%	**Recovery less than lower data quality objective**
EG048: Hexavalent Chromium (Alkaline Digest)	EM2203907--001	Anonymous	**Hexavalent Chromium**	18540-29-9	2.3 %	58.0-114%	**Recovery less than lower data quality objective**
EP231A: Perfluoroalkyl Sulfonic Acids	EM2203476--002	Anonymous	**Perfluoropentane sulfonic acid (PFPeS)**	2706-91-4	72.3 %	73.0-123%	**Recovery less than lower data quality objective**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2203625--008	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	55.5 %	70.0-130%	**Recovery less than lower data quality objective**

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*
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	10-Mar-2022	✓	**10-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	11-Mar-2022	✓	**10-Mar-2022**	10-Mar-2022	✓

Matrix: **SOIL**

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

Method	***Sample Date***	*Extraction / Preparation*			*Analysis*		
Container */ Client Sample ID(s)*		***Date extracted***	*Due for extraction*	*Evaluation*	***Date analysed***	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**----**	----	----	**09-Mar-2022**	17-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**----**	----	----	**09-Mar-2022**	18-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	30-Aug-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	31-Aug-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	31-Mar-2022	✓	**10-Mar-2022**	31-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	01-Apr-2022	✓	**10-Mar-2022**	01-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	31-Mar-2022	✓	**11-Mar-2022**	17-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	01-Apr-2022	✓	**11-Mar-2022**	17-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**10-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**10-Mar-2022**	23-Mar-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	31-Mar-2022	✓	**11-Mar-2022**	31-Mar-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	01-Apr-2022	✓	**11-Mar-2022**	01-Apr-2022	✓

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*
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	31-Aug-2022	✓	**----**	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	30-Aug-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	31-Aug-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	11-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	11-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	11-Mar-2022	✓

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*
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	17-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	18-Mar-2022	✓	**09-Mar-2022**	18-Apr-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	11-Mar-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**09-Mar-2022**	10-Mar-2022	✓	**09-Mar-2022**	10-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**09-Mar-2022**	11-Mar-2022	✓	**09-Mar-2022**	11-Mar-2022	✓

Matrix: **SOIL**

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

Method	*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)		*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS	**03-Mar-2022**	**10-Mar-2022**	30-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**04-Mar-2022**	**10-Mar-2022**	31-Aug-2022	✓	**10-Mar-2022**	19-Apr-2022	✓

Matrix: **WATER**

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

Method	*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)		*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*

Matrix: **WATER**

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

Method ***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) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS, SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**09-Mar-2022**	**10-Mar-2022**	05-Sep-2022	✓	**10-Mar-2022**	05-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS, SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**09-Mar-2022**	**10-Mar-2022**	05-Sep-2022	✓	**10-Mar-2022**	05-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS, SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**09-Mar-2022**	**10-Mar-2022**	05-Sep-2022	✓	**10-Mar-2022**	05-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS, SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**09-Mar-2022**	**10-Mar-2022**	05-Sep-2022	✓	**10-Mar-2022**	05-Sep-2022	✓

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)								
SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS, SX_OB_20220303_12_23_SS_Primary_ALS, SX_OB_20220303_16_19_SS_Triplicate_ALS, SX_OB_20220304_00_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Primary_ALS,	SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS, SX_OB_20220303_16_24_SS_Primary_ALS, SX_OB_20220303_20_12_SS_Primary_ALS, SX_OB_20220304_04_02_SS_Primary_ALS, SX_OB_20220304_08_22_SS_Duplicate_ALS	**09-Mar-2022**	**10-Mar-2022**	05-Sep-2022	✓	**10-Mar-2022**	05-Sep-2022	✓

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)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	38	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	38	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	38	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

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*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	38	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**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	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	36	**5.56**	**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*
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
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).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. 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 and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	*Method*	*Matrix*	*Method Descriptions*
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	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.

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CHAIN OF CUSTODY DOCUMENTATION

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PROJECT ID: JC0927
SITE: 20220304085857-ALS-14
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RESULTS REQUIRED (Date): 5 days
QUOTE NO.: ME-150-19 WGTP

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ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

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COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION							
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep		P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1,9	SX_OB_20220303_12_23_SS_Primary_ALS	S	03.03.22	12:23	Bucket	1	x		x	x	x	x
2,10	SX_OB_20220303_16_24_SS_Primary_ALS	S	03.03.22	16:24	Bucket	1	x		x	x	x	x
3,11	SX_OB_20220303_16_19_SS_Triplicate_ALS	S	03.03.22	16:19	Bucket	1	x		x	x	x	x
4,12	SX_OB_20220303_20_12_SS_Primary_ALS	S	03.03.22	20:20	Bucket	1	x		x	x	x	x
5,13	SX_OB_20220304_00_02_SS_Primary_ALS	S	04.03.22	0:02	Bucket	1	x		x	x	x	x
6,14	SX_OB_20220304_04_04_SS_Primary_ALS	S	04.03.22	4:04	Bucket	1	x		x	x	x	x
7,15	SX_OB_20220304_08_22_SS_Primary_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x
8,16	SX_OB_20220304_08_22_SS_Duplicate_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203882

Telephone : - 61-3-8549 9600

Received: 4/3 13.15 Carrier:
C/note:
Temp: 26.9°C Seal: [✓ Y] N
Ice / Icebricks / [✓ NA]

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date:	Name:	Date:	Con' Note No:
Of:	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved;
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220304085857-ALS-14
P.O. NO.:
RESULTS REQUIRED (**Date**): 5 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: Brandon Clarke - Agon Environmental
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au
motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes:

	SAMPLE INFORMATION (note: S = Soil, W=Water)				CONTAINER INFORMATION								
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep		P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1, 9	SX_OB_20220303_12_23_SS_Primary_ALS	S	03.03.22	12:23	Bucket	1	x		x	x	x	x
2, 10	SX_OB_20220303_16_24_SS_Primary_ALS	S	03.03.22	16:24	Bucket	1	x		x	x	x	x
3, 11	SX_OB_20220303_16_19_SS_Triplicate_ALS	S	03.03.22	16:19	Bucket	1	x		x	x	x	x
4, 12	SX_OB_20220303_20_12_SS_Primary_ALS	S	03.03.22	20:20	Bucket	1	x		x	x	x	x
5, 13	SX_OB_20220304_00_02_SS_Primary_ALS	S	04.03.22	0:02	Bucket	1	x		x	x	x	x
6, 14	SX_OB_20220304_04_04_SS_Primary_ALS	S	04.03.22	4:04	Bucket	1	x		x	x	x	x
7, 15	SX_OB_20220304_08_22_SS_Primary_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x
7 16	SX_OB_20220304_08_22_SS_Duplicate_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203882

Telephone : + 61-3-8549 9600

Received: 4/3 13.15 Carrier:
C/note:
Temp: 26.9 °C Seal: [✓ Y] N
Ice / Icebricks / [✓ NA]

RELINQUISHED BY:
Name:
Of:
Date:
Time:
Name:
Of:
Date:
Time:

RECEIVED BY
Name: Marre
Of:
Date:
Time:
Name:
Of:
Date:
Time:

METHOD OF SHIPMENT
Con' Note No:
Transport Co:

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600 Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220304085857-ALS-14
RESULTS REQUIRED (Date): 5 days
P.O. NO.:
QUOTE NO.: ME-150-13 WGTP

SCANNED

SAMPLER: Brandon Clarke - Agon Environmental
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION							
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep		P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1 9	SX_OB_20220303_12_23_SS_Primary_ALS	S	03.03.22	12:23	Bucket	1	x		x	x	x	x
2 [illegible]	SX_OB_20220303_16_24_SS_Primary_ALS	S	03.03.22	16:24	Bucket	1	x		x	x	x	x
3 [illegible]	SX_OB_20220303_16_19_SS_Triplicate_ALS	S	03.03.22	16:19	Bucket	1	x		x	x	x	x
4 12	SX_OB_20220303_20_12_SS_Primary_ALS	S	03.03.22	20:20	Bucket	1	x		x	x	x	x
5 13	SX_OB_20220304_00_02_SS_Primary_ALS	S	04.03.22	0:02	Bucket	1	x		x	x	x	x
6 14	SX_OB_20220304_04_04_SS_Primary_ALS	S	04.03.22	4:04	Bucket	1	x		x	x	x	x
7 15	SX_OB_20220304_08_22_SS_Primary_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x
8 16	SX_OB_20220304_08_22_SS_Duplicate_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x

Environmental Division
Melbourne
Work Order Reference
EM2203882

Telephone : + 61-3-8549 9600

Received: 4/3 13.15 Carrier:
C/note:
Temp: 26.9°C Seal [✓ Y] N
Ice / Icebricks / [✓ NA]

RELINQUISHED BY:		RECEIVED BY			METHOD OF SHIPMENT
Name:	Date:	Name:	Marke	Date:	Con' Note No:
Of:	Time:	Of:		Time:	
Name:	Date:	Name:		Date:	Transport Co:
Of:	Time:	Of:		Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved;
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AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

MS 7/3

Ranil Weerakkody

From: Bronwyn Sheen
Sent: Friday, 4 March 2022 9:51 AM
To: COC Melbourne
Subject: AGOENV - JC0927 – Samples incoming
Attachments: 20220304085857-ALS-14 solid_001.xls

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: COC for incoming samples

HI Ranil,
Today's samples from WGTP.

Kind Regards,

right solutions.
right partner.

Bronwyn Sheen
Client Services Manager - VIC
ALS Limited

D: +61 3 8549 9636
M: 0438 174 359
bronwyn.sheen@alsglobal.com

2-4 Westall Road, Springvale VIC 3171

alsglobal.com

From: Brandon Clarke [mailto:Brandon.Clarke@agonenviro.com.au]
Sent: Friday, 4 March 2022 9:10 AM
To: Bronwyn Sheen <bronwyn.sheen@alsglobal.com>
Cc: Labreports.TST <labreports.tst@agonenviro.com.au>; Craig Trimbur <Craig.Trimbur@eprisk.com.au>; motherhublabresults1@wgtp.com.au
Subject: [EXTERNAL] - WGTP TST Sample Collection

Hi Bronwyn,

Please find COC for 20220304085857 attached

Regards,

Brandon

Brandon Clarke
Environmental Consultant
Hazmat Consultant

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600 Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220304085857-ALS-14 P.O. NO.:
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP

SAMPLER: Brandon Clarke - Agon Environmental
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au
motherhublabresults1@wgtp.com.au
EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION																	
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep		P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite									Notes:
	SX_OB_20220303_12_23_SS_Primary_ALS	S	03.03.22	12:23	Bucket	1	x		x	x	x	x									
	SX_OB_20220303_16_24_SS_Primary_ALS	S	03.03.22	16:24	Bucket	1	x		x	x	x	x									
	SX_OB_20220303_16_19_SS_Triplicate_ALS	S	03.03.22	16:19	Bucket	1	x		x	x	x	x									
	SX_OB_20220303_20_12_SS_Primary_ALS	S	03.03.22	20:20	Bucket	1	x		x	x	x	x									
	SX_OB_20220304_00_02_SS_Primary_ALS	S	04.03.22	0:02	Bucket	1	x		x	x	x	x									
	SX_OB_20220304_04_04_SS_Primary_ALS	S	04.03.22	4:04	Bucket	1	x		x	x	x	x									
	SX_OB_20220304_08_22_SS_Primary_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x									
	SX_OB_20220304_08_22_SS_Duplicate_ALS	S	04.03.22	8:22	Bucket	1	x		x	x	x	x									

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date:	Name:	Date:	Con' Note No:
Of:	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved;
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page ___ of ___

From:	David Lawson <David.Lawson@agonenviro.com.au>
Sent:	Wednesday, 9 March 2022 11:14 AM
To:	Labreports.TST; Bronwyn Sheen; ALS WGTP
Subject:	[EXTERNAL] - RE: SRN for ALS Workorder : EM2203882 | Overall Description: 2022304085857-ALS-14
Attachments:	20220304085857-ALS-14_solid_01.xls

Hi Sorry,

Didn't mean to press send yet.

Could you please update the overall description from 2022304085857-ALS-14 to 20220304085857-ALS-14 and reissue the SRN.

I have attached an updated COC.

Kind reagrds,

David Lawson
Environmental Scientist
Agon Environmental Pty Ltd
david.lawson@agonenviro.com.au
0490 411 004

From: Labreports.TST
Sent: Wednesday, 9 March 2022 11:11 AM
To: Bronwyn Sheen <bronwyn.sheen@alsglobal.com>; ALS WGTP <ALS.WGTP@alsglobal.com>
Cc: Craig Trimbur <Craig.Trimbur@eprisk.com.au>
Subject: FW: SRN for ALS Workorder : EM2203882 | Overall Description: 2022304085857-ALS-14

Hi Bronwyn,

Can we please update the overall description from 2022304085857-ALS-14 to 20220304085857-ALS-14

David Lawson
Environmental Scientist
Agon Environmental Pty Ltd
david.lawson@agonenviro.com.au
0490 411 004

From: angel-no-reply@alsglobal.com <angel-no-reply@alsglobal.com>
Sent: Monday, 7 March 2022 1:52 PM
To: Labreports.TST <labreports.tst@agonenviro.com.au>
Subject: SRN for ALS Workorder : EM2203882 | Overall Description: 2022304085857-ALS-14