

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	B04.0220220502102538_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
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1. Motherhub Summary

Source TBM/Bin at Pivot	1	Source Geological Domain	4
Approx. Source Tunnel Chainage From	440	Approx. Source Tunnel Chainage To	448
Approx. Rings From	186	Approx. Rings To	190
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	B04.02	Start of Filling From (Time / date)	14/04/2022
Tonnes Put in Holding Bay No:	7765.69	Finish of Filling (Time / Date)	15/04/2022
Classified Volume (LCM)	4000	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1: 173.91	Approx. Bank Cubic Meters (BCM)	1529.08

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 (SO 9038429)	Yes
PIW-Category C - 2019/405 (SO 9038560)	No
PIW-Category B - 2019/406 (SO 9038561)	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, if 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

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Table 3.1 - Applicable Sample ID's

Table 3.1 - 1 Applicable Sample ID's

Applicable Spoil Sample ID's		
SX_OB_20220414_08_58_SS_Primary_EUF	SX_OB_20220414_15_47_SS_Primary_ALS	SX_OB_20220415_04_06_SS_Primary_EUF
SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_15_50_SS_Primary_EUF	SX_OB_20220415_04_17_SS_Primary_ALS
SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_15_51_SS_Duplicate_EUF	SX_OB_20220415_08_46_SS_Primary_EUF
SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220415_08_48_SS_Duplicate_EUF
SX_OB_20220414_09_04_SS_Triplicate_EUF	SX_OB_20220414_20_09_SS_Primary_EUF	SX_OB_20220415_08_50_SS_Primary_ALS
SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_08_50_SS_Triplicate_ALS
SX_OB_20220414_12_01_SS_Primary_EUF	SX_OB_20220415_00_06_SS_Primary_EUF	SX_OB_20220415_12_04_SS_Primary_EUF
SX_OB_20220414_12_03_SS_Primary_EUF	SX_OB_20220415_00_14_SS_Primary_ALS	
Total Sample Numbers	23	Ratio Acceptable
Primary Sample Numbers	17	Yes
Classified Volume (LCM)	4000 m ³	
Volume: Sample Number Ratio (Samples per LCM)	1: 173.91	

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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

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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)
<p>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</p> <p>If the answer is Yes, go to E. If the answer is No, go to B.</p>	Yes
<p>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?</p> <p>If the answer is Yes, go to C. If the answer is No, go to D.</p>	NA
<p>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)?</p>	NA
<p>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)?</p>	NA
<p>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?</p>	Yes
<p>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?</p>	No

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3.4 Spoil Compliance with SAQP Criteria for Containment Cell

Table 3.4 - 1 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 TCO?	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) prohibit NPIW Containment as a spoil Classification Outcome? If no to all of Questions A, B, C and E, then respond NA to this question.	No
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
<i>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</i>	
Notes:	
<ol style="list-style-type: none"> 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 	

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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 samples	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	23*	17	1 : 173.91	23	27	41.13	44.7	67	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Chromium (Hexavalent)	mg/kg	1	23*	17	1 : 173.91	2	<1	2.5	N/A	2.6	1	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Nickel	mg/kg	5	23*	17	1 : 173.91	23	153	196.6	211.1	320	60	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)

“*” - Ratio used for categorisation of spoil is number of samples to LCM due to spoil not being from a zone of exception. (See Section 4)

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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	

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

PFAS Test Results											
Chemical	Unit	LOR	No. of Samples	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	23*	17	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	23*	17	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	23*	17	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	23*	17	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	23*	17	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	23*	17	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	23*	17	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment

“*” - Ratio used for categorisation of spoil is total samples to LCM due to spoil not being from a zone of exception. (See Section 4)

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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

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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												

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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	

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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												

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4. Comments and Limitations

Comments and Limitations	
1.	<p>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:</p> <ol style="list-style-type: none"> 1. Technical discussion around the naturally occurring metal concentrations found in soils beneath the WGTP is detailed in <i>Golder (2017b) – Technical Report B, Appendix E – Environmental characterisation of spoil (natural soil and rock)</i>. 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. <ol style="list-style-type: none"> a. Arsenic – <i>Golder (2017b) – Technical Report B, Appendix E</i> section 6.2 <i>Arsenic enrichment in the residual soil of the upper Older Volcanics (Tvo1)</i> 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: <ol style="list-style-type: none"> 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. <p>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.</p> b. Nickel – <i>Golder (2017b) – Technical Report B, Appendix E</i> section 6.3 <i>Nickel enrichment within the upper Older Volcanics</i> found that <ol style="list-style-type: none"> 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 (Tvo) 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 tertiary volcanics (Tvo2) soil) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

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iv. Enriched nickel concentrations also corresponded with enriched copper (Two 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. Previous reviews of the presence of hexavalent chromium (CrVI) in soil data outlined on the SAQP (Rev 5) were undertaken by Golders (2017) and later consolidated with data compiled by Mikkonen by AJJV (2019). The AJJV review of the consolidated data set identified:

- Samples reported to contain hexavalent chromium above the IWRG621 Table 2 Fill Material Upper Limit of 1mg/kg, were not collected in areas considered to be where anthropogenic sources of CrVI were present
- The ratio of tests reported above the laboratory LOR of 0.5 mg/kg was 15 out of 84 tests
- The ratio of tests where CrVI was above 1mg/kg was 3 in 84 samples
- The maximum reported concentration was 2.8mg/kg
- The 95%UCLave was 0.439

The AJJV data review was to assess whether the spoil derived from the tunnelling operations would contain chemicals that would result in the spoil being classified as something other than Fill Material. AJJV concluded the CrVI was present due to natural enrichment. Refer extract from the AJJV report below:

In summary, the reported CrVI concentration reported in the Older Volcanics are considered to be naturally occurring / enriched based on the following:

- *No potential CrVI sources have been identified in the vicinity of the sampling locations that reported the CrVI concentrations.*
- *Similar concentrations of CrVI were reported in the Older Volcanics on the MMRP, that were deemed to be naturally occurring.*
- *The 2017 Golder report concluded that enriched arsenic concentrations in the Older Volcanics on WGT*
- *Corresponded with enriched vanadium indicating that the arsenic is likely associated with geochemical enrichment rather than added contamination. The elevated CrVI is also found through this area deemed to be geochemically enriched.*

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- *There were limited exceedances of CrVI in the groundwater, which suggested no evidence of an anthropogenic source or Potential pathway from the surface*

Given the large volume of ground to be tunnelled, the 95% UCL's in Table E.2 and the likely naturally enriched nature of the reported CrVI, AJJV consider that the CrVI impacts will not alter the spoil classification within Domain 5. AJJV note that the material will undergo ongoing sampling as the TBM spoil is produced – sampling will be outlined within the SAQP. If any contaminated material is encountered beyond the extent of the nominated potentially contaminated domains, this will trigger management of the material in accordance with Tunnel Spoil Disposal Framework.

Agon notes that Table E1: Summary of elevated concentration within Natural materials concludes the presence of hexavalent chromium may “Potentially” classify the spoil as PIW.

Unit	Element Exceeding Criteria	Count	Detects	Min	Max	Mean	Median	Standard Deviation	Count of Exceedance	95% UCL	Fill Material Upper Limit	Victorian Background Soil Database Soil greater than 0.6 m below surface				Findings		Classification as PIW
												Count	Min#	Max	Mean	95% UCL Statistical Assessment	Victorian Soil Database Assessment	
Older Volcanics	Fluoride	84	1	50	600	204	185	109	2	225.1	450	92	<100	790	283	Not Exceeding	Natural Origin	No Affect
	Arsenic	101	84	<4	860	33	7	116	25	84.6	20	994	≤10	1200	18	Exceeding	Natural Origin	No Affect
	Cadmium	103	6	<0.1	3	0.52	0.5	0.41	2	NA	3	-	-	-	-	NA	No Data	No Affect
	Chromium (VI) ¹	84	15	<0.5	2.8	0.927	0.7	0.592	3	0.439	1	-	-	-	-	NA	No Data	Potentially
	Copper	101	98	<5	326	63	55	44	15	82.4	100	799	<25	87	<25	Not Exceeding	No Data	No Affect
	Mercury	101	7	<0.1	1.7	0.077	0.05	0.17	1	NA	1	-	-	-	-	NA	No Data	No Affect
	Nickel	101	99	<2	451	127	115	73	88	140.6	60	830	<25	170	28	Exceeding	Natural Origin	No Affect
	Zinc	101	99	<5	483	84	63	79	6	98.7	200	819	<25	190	<25	Not Exceeding	No Data	No Affect

A review of the Agon data for spoil reported in data set B.05 shows:

- A similar ratio of test results >1mg/kg compared to the overall data set;
 - If a ½ LOR is substituted for results reported as <LOR (of 1mg/kg), then like the AJJV 95% UCL, the calculation is <1mg/kg
- The results also show that there are no synthetic compounds reported above the laboratory LOR, another indication that anthropogenic contamination is not present

2. Test result outcomes can lead to two classification possibilities, however the classification decision follows the preference of the waste management hierarchy.

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3.	Spoil is not from a “Zone of Exception”. Zone of exception applies a sampling ratio of only Primary Samples to LCM to categorise spoil as per the SAQP revision 5. Sample to categorised volume ratio in zones of exception is to be as per IWRG702 with 1 primary spoil sample categorising a maximum 250 m3 of spoil.
4.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes
5.	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.
6.	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.
7.	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.
8.	This report should be read in full.

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5. Attachments

ATTACHMENT A: TABULATED RESULTS

ATTACHMENT B: 95% UCL AVE CALCULATIONS

ATTACHMENT C: LABORATORY CERTIFICATES

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ATTACHMENT A: TABULATED RESULTS

								Metals								
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								2	0.4	5	5	1	5	0.1	5	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 Category B Leached Upper Limits																
EPA Victoria IWRG621 Category B Upper Limits								2,000	400	20,000		2,000	6,000	300	4,000	12,000
EPA Victoria IWRG621 Category C Leached Upper Limits																
EPA Victoria IWRG621 Category C Upper Limits								500	100	5,000		500	1,500	75	1,000	3,000
EPA Victoria IWRG621 Fill Upper Limits								20	3	100		1	300	1	40	60

Location Code	Field ID	Sample Code	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample	Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	M22-Ap0034680	14/04/2022	880598	MGT	Normal		67	<0.4	57	120	2.4	5.3	<0.1	<5	190
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	M22-Ap0034702	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	M22-Ap0034720	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS	EM2206959001	14/04/2022	EM2206959	ALSE-Melbourne	Normal		32	<1	54	90	<1.0	<5	<0.1	<5	165
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS	EM2206959019	14/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	EM2206959002	14/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959003	35	<1	60	100	<1.0	<5	<0.1	<5	164
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	EM2206959020	14/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959021									
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	EM2206959003	14/04/2022	EM2206959	ALSE-Melbourne	Normal		27	<1	52	100	<1.0	<5	<0.1	<5	153
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	EM2206959021	14/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	M22-Ap0034681	14/04/2022	880598	MGT	Interlab_D	EM2206959003	38	<0.4	60	130	<1	5.2	<0.1	<5	190
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	M22-Ap0034703	14/04/2022	880598	MGT	Interlab_D	EM2206959003									
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	M22-Ap0034721	14/04/2022	880598	MGT	Interlab_D	EM2206959021									
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS	EM2206959004	14/04/2022	EM2206959	ALSE-Melbourne	Normal		31	<1	66	110	<1.0	<5	<0.1	<5	192
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS	EM2206959022	14/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	M22-Ap0034682	14/04/2022	880598	MGT	Normal		51	<0.4	73	120	<1	6.7	<0.1	<5	230
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	M22-Ap0034704	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	M22-Ap0034722	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	M22-Ap0034683	14/04/2022	880598	MGT	Normal		45	<0.4	71	100	<1	6.2	<0.1	<5	230
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	M22-Ap0034705	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	M22-Ap0034723	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS	EM2206959005	14/04/2022	EM2206959	ALSE-Melbourne	Normal		32	<1	55	113	<1.0	<5	<0.1	<5	172
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS	EM2206959023	14/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	M22-Ap0034684	14/04/2022	880598	MGT	Normal		58	<0.4	85	150	<1	7.3	<0.1	<5	240
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	M22-Ap0034706	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	M22-Ap0034724	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	M22-Ap0034685	14/04/2022	880598	MGT	Field_D	M22-Ap0034684	44	<0.4	68	140	<1	5.8	<0.1	<5	210
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	M22-Ap0034707	14/04/2022	880598	MGT	Field_D	M22-Ap0034706									
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	M22-Ap0034725	14/04/2022	880598	MGT	Field_D	M22-Ap0034724									
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	EM2206959006	14/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034684	34	<1	58	110	<1.0	<5	<0.1	<5	174
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	EM2206959024	14/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034724									
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	M22-Ap0034688	14/04/2022	880598	MGT	Normal		47	<0.4	69	130	<1	5.5	<0.1	<5	210
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	M22-Ap0034708	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	M22-Ap0034726	14/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS	EM2206959007	14/04/2022	EM2206959	ALSE-Melbourne	Normal		34	<1	71	119	<1.0	<5	<0.1	<5	182
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS	EM2206959025	14/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	M22-Ap0034689	15/04/2022	880598	MGT	Normal		39	<0.4	69	150	<1	5.7	<0.1	<5	220
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	M22-Ap0034709	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	M22-Ap0034727	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS	EM2206959008	15/04/2022	EM2206959	ALSE-Melbourne	Normal		41	2	66	124	<1.0	10	<0.1	<5	180
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS	EM2206959026	15/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	M22-Ap0034690	15/04/2022	880598	MGT	Normal		45	<0.4	61	150	<1	<5	<0.1	<5	190
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	M22-Ap0034710	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	M22-Ap0034728	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS	EM2206959009	15/04/2022	EM2206959	ALSE-Melbourne	Normal		30	<1	54	111	<1.0	6	<0.1	<5	160
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS	EM2206959027	15/04/2022	EM2206959	ALSE-Melbourne	Normal										
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	M22-Ap0034691	15/04/2022	880598	MGT	Normal		58	<0.4	86	180	<1	6.1	<0.1	<5	240
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	M22-Ap0034711	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	M22-Ap0034729	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	M22-Ap0034692	15/04/2022	880598	MGT	Field_D	M22-Ap0034691	40	<0.4	58	130	<1	5.2	<0.1	<5	190
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	M22-Ap0034712	15/04/2022	880598	MGT	Field_D	M22-Ap0034711									
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	M22-Ap0034730	15/04/2022	880598	MGT	Field_D	M22-Ap0034729									
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS	EM2206959012	15/04/2022	EM2206959	ALSE-Melbourne	Normal		38	<1	52	104	<1.0	<5	<0.1	<5	158
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS	EM2206959030	15/04/2022	EM2206959	ALSE-Melbourne	Normal										

Metals

							Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	EM2206959011	15/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034691	43	1	53	93	<1.0	<5	<0.1	<5	161
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	EM2206959029	15/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034729									
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	M22-Ap0034693	15/04/2022	880598	MGT	Normal		37	<0.4	95	210	2.6	5.5	<0.1	<5	320
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	M22-Ap0034713	15/04/2022	880598	MGT	Normal										
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	M22-Ap0034731	15/04/2022	880598	MGT	Normal										

	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+h)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(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	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	
EQL	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																							
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																							
EPA Victoria IWRG621 Category B Leached Upper Limits																							
EPA Victoria IWRG621 Category B Upper Limits	200	720		140,000	400									20									
EPA Victoria IWRG621 Category C Leached Upper Limits																							
EPA Victoria IWRG621 Category C Upper Limits	50	180	500	35,000	100									5									
EPA Victoria IWRG621 Fill Upper Limits	10	10	50	200	20									1									

Location Code	Field ID	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+h)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(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	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<2	<2	<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																							
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																							
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS	<5	<2	<10	92	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<5	<2	<10	115	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<5	<2	<10	99	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<2	<2	<10	130		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS	<5	<2	<10	118	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<2	<2	<10	140		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<2	<2	<10	140		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS	<5	<2	<10	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<2	<2	<10	170		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<2	<2	<10	140		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<5	<2	<10	106	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	<2	<2	<10	160		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS	<5	<2	<10	126	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	<2	<2	<10	140		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS	<5	<2	<10	80	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<2	<2	<10	110		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS	<5	<2	<10	108	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<2	<2	<10	150		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<2	<2	<10	110		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS	<5	<2	<10	83	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS																							

		PAH																					
		Selenium mg/kg	Silver mg/kg	Tin mg/kg	Zinc mg/kg	PAHs (Vic EPA List) mg/kg	Benzo(b+j)fluoranthene mg/kg	Acenaphthene mg/kg	Acenaphthylene mg/kg	Anthracene mg/kg	Benzo(a)anthracene mg/kg	Benzo(a)pyrene TEQ calc (Zero) mg/kg	Benzo(a)pyrene TEQ (LOR) mg/kg	Benzo(a)pyrene TEQ calc (Half) mg/kg	Benzo(a)pyrene mg/kg	Benzo(b+j)fluoranthene mg/kg	Benzo(g,h,i)perylene mg/kg	Benzo(k)fluoranthene mg/kg	Chrysene mg/kg	Dibenz(a,h)anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno(1,2,3-c,d)pyrene mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<5	<2	<10	84	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																						
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<2	<2	<10	170			<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																						
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																						

	PAHs (Sum of total)				BTEX						TRH						TPH					
	Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	PAHs (Sum of total) mg/kg	Benzene mg/kg	Ethylbenzene mg/kg	Toluene mg/kg	Xylene (o) mg/kg	Xylene (m & p) mg/kg	Xylene Total mg/kg	C6-C10 mg/kg	C6-C10 (F1 minus BTEX) mg/kg	C10-C16 mg/kg	C10-C16 (F2 minus Naphthalene) mg/kg	C16-C34 mg/kg	C34-C40 mg/kg	C10-C40 (Sum of total) mg/kg	C6-C9 mg/kg	C10-C14 mg/kg	C15-C28 mg/kg	C29-C36 mg/kg	C10-C36 (Sum of total) mg/kg
EQL	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.2	0.3	20	20	50	50	100	100	50	20	20	50	50	50
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																						
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits				400	16													2,600				40,000
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits				100	4													650				10,000
EPA Victoria IWRG621 Fill Upper Limits				20	1													100				1,000

Location Code	Field ID	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	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)	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																							
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																							
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS																							

						BTEX						TRH						TPH				
		Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	PAHs (Sum of total) mg/kg	Benzene mg/kg	Ethylbenzene mg/kg	Toluene mg/kg	Xylene (o) mg/kg	Xylene (m & p) mg/kg	Xylene Total mg/kg	C6-C10 mg/kg	C6-C10 (F1 minus BTEX) mg/kg	C10-C16 mg/kg	C10-C16 (F2 minus Naphthalene) mg/kg	C16-C34 mg/kg	C34-C40 mg/kg	C10-C40 (Sum of total) mg/kg	C6-C9 mg/kg	C10-C14 mg/kg	C15-C28 mg/kg	C29-C36 mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																					
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																					
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																					

		Organochlorine Pesticides																						
		Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	α-BHC	β-BHC	γ-BHC	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																							
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																							

	Phenols																						
	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vc	Other organochlorine pesticides EPA Vc	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	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vc	Phenols (non-halogenated) EPA Vc	2,4-Dimethylphenol	2-Methylphenol	
EQL	0.05	0.05	0.5	0.1	0.03	0.5	0.5	1	1	0.5	1	1	0.05	5	10	0.03	0.5	20	1	20	0.5	0.2	
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																							
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																							
EPA Victoria IWRG621 Category B Leached Upper Limits																							
EPA Victoria IWRG621 Category B Upper Limits					50														320	2,200			
EPA Victoria IWRG621 Category C Leached Upper Limits																							
EPA Victoria IWRG621 Category C Upper Limits					10														10	560			
EPA Victoria IWRG621 Fill Upper Limits				1															1	60			

Location Code	Field ID	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vc	Other organochlorine pesticides EPA Vc	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	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vc	Phenols (non-halogenated) EPA Vc	2,4-Dimethylphenol	2-Methylphenol	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																							
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
B04.02	SX_OB_20220414_11_54_SS_Primary_EUF	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS	<0.05	<0.05	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																							
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																							
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS																							

		Phenols																						
		γ-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vlc	Other organochlorine pesticides EPA Vlc	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	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vlc	Phenols (non-halogenated) EPA Vlc	2,4-Dimethylphenol	2-Methylphenol	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																							
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																							

		2-Nitrophenol	2,4-Dinitrophenol	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 acid (6:2 FTS)		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NETFOSA)		N-ethyl-perfluorooctanesulfonamide acetic acid (NETFOAAA)		N-ethylperfluorooctanesulfonamide ethanol (NETFOSEE)			
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	mg/kg	mg/L	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<1	<5	<1	<5	<20	<1			<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	<0.00005	<0.0050
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS									<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF									<0.00001		<0.00001		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF									<0.00001		<0.00001		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	

PFOS/PFOA

		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)	
		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	mg/L	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	

		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)	
		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	mg/L	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00002				<0.00001		<0.00005		<0.00002		<0.00002				<0.00005		<0.00002		<0.00002		<0.00001	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	

		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		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	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg													mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500													
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.00001		<0.00001						<0.00010														
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.0001														
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.0001														

	Chlorinated Hydrocarbons																		NA				
	Chloromethane	cis-1,3-dichloropropene	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	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*	Moisture Content	Arochlor 1232		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05		1	0.1	
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																							
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																							
EPA Victoria IWRG621 Category B Leached Upper Limits																							
EPA Victoria IWRG621 Category B Upper Limits					11	50						4.8											
EPA Victoria IWRG621 Category C Leached Upper Limits																							
EPA Victoria IWRG621 Category C Upper Limits					2.8	10						1.2											
EPA Victoria IWRG621 Fill Upper Limits								1															

Location Code	Field ID	Chloromethane	cis-1,3-dichloropropene	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	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*	Moisture Content	Arochlor 1232	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	29.3	
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	32.8	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																			<0.05			
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	33.9	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																			<0.05			
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																			<0.05			
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	31.8	
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	27.7	
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																			<0.05			
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																			<0.05			
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	32.2	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																			<0.05			
B04.02	SX_OB_20220414_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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	32.6	
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220415_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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	28.1	
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	31.9	
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS																			<0.05			
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																			<0.05			
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																			<0.05			
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50			<0.50	<0.50	<10.0	<0.05	27.6	
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS																			<0.05			

		Chlorinated Hydrocarbons																	NA				
		Chloromethane	cis-1,3-dichloropropene	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	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	26.4	
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																				<0.05		
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																			<0.05			
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																			<0.05			

	PCBs							Inorganics							Halogenated Benzenes								
	Arochlor 1242	Arochlor 1248	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	Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																							
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																							
EPA Victoria IWRG621 Category B Leached Upper Limits																							
EPA Victoria IWRG621 Category B Upper Limits													40,000		10,000								
EPA Victoria IWRG621 Category C Leached Upper Limits																							
EPA Victoria IWRG621 Category C Upper Limits													10,000		2,500								
EPA Victoria IWRG621 Fill Upper Limits							2						450		50								

Location Code	Field ID	Arochlor 1242	Arochlor 1248	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	Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		5.2		5.0	8.3	<100	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF									9.3		6.4											
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS							<0.1	1.1	5.0	8.7	5.0		140		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS									9.4													
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS							<0.1	1.0	5.0	8.6	5.0		130		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS									9.4													
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS							<0.1	1.0	5.0	8.5	5.0		110		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS									9.4													
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.0	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF									5.1		5.0											
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF									8.9		6.4											
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS							<0.1	1.0	5.0	8.8	5.0		170		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS									9.4													
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					6.9	390	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF									7.4		5.1											
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF									5.2		5.1											
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.9	370	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF									5.3		6.4											
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF									7.1		6.4											
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF									9.5													
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS							<0.1	1.0	5.0	9.3	5.0		170		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS									9.6													
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.1	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF									5.1		5.0											
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF									8.8		6.4											
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.9	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF									5.0		5.0											
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF									8.8		6.4											
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS							<0.1	1.0	5.0	8.7	5.0		140		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS									9.5													
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.6	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF									5.0		5.0											
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF									8.9		6.4											
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS							<0.1	1.0	5.0	8.0	5.0		150		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS									9.3													
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.9	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF									5.0		5.0											
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF									8.7		6.4											
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS							<0.1	1.0	5.0	9.3	5.0		140		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS									9.6													
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.3	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF									5.0		5.0											
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF									8.9		6.4											
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS							<0.1	1.1	5.0	8.9	5.0		120		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS									9.5													
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF									5.0		5.0											
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF									9.0		6.4											
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.8	<100	27	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF									5.0		5.0											
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF									9.0		6.4											
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS							<0.1	1.0	5.0	9.1	5.0		170		<5	<0.50	<0.50		<0.50			<0.50
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS									9.8													

		PCBs						Inorganics							Halogenated Benzenes								
		Arochlor 1242	Arochlor 1248	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	Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS							<0.1	1.1	5.0	9.2	5.0	-	140	<5	<0.50	<0.50						<0.50
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS									9.9													
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.5	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF									5.1		5.0											
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF									9.0		6.4											

	Halogenated Hydrocarbons					MAH						Solvents					SPOCAS
	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAV/c	1,3,5-trimethylbenzene	Styrene	Iso propylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresh																	
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresh																	
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresh																	
EPA PFAS Classification - Tunnel Zone - No option for disposal thresho																	
EPA Victoria IWRG621 Category B Leached Upper Limits																	
EPA Victoria IWRG621 Category B Upper Limits							240										
EPA Victoria IWRG621 Category C Leached Upper Limits																	
EPA Victoria IWRG621 Category C Upper Limits							70										
EPA Victoria IWRG621 Fill Upper Limits							7										

Location Code	Field ID	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAV/c	1,3,5-trimethylbenzene	Styrene	Iso propylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)	
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																		
B04.02	SX_OB_20220414_08_58_SS_Primary_EUF																		
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS							<0.5		<0.5								7.5	
B04.02	SX_OB_20220414_09_01_SS_Primary_ALS																		
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS							<0.5		<0.5									7.6
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																		
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS							<0.5		<0.5									7.6
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																		
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																		
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																		
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS							<0.5		<0.5									7.7
B04.02	SX_OB_20220414_11_54_SS_Primary_ALS																		
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																		
B04.02	SX_OB_20220414_12_01_SS_Primary_EUF																		
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																		
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																		
B04.02	SX_OB_20220414_12_03_SS_Primary_EUF																		
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS							<0.5		<0.5									7.7
B04.02	SX_OB_20220414_15_47_SS_Primary_ALS																		
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																		
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																		
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																		
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																		
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS							<0.5		<0.5									7.7
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																		
B04.02	SX_OB_20220414_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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																		
B04.02	SX_OB_20220414_20_09_SS_Primary_EUF																		
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS							<0.5		<0.5									7.6
B04.02	SX_OB_20220414_20_14_SS_Primary_ALS																		
B04.02	SX_OB_20220415_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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																		
B04.02	SX_OB_20220415_00_06_SS_Primary_EUF																		
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS							<0.5		<0.5									7.8
B04.02	SX_OB_20220415_00_14_SS_Primary_ALS																		
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																		
B04.02	SX_OB_20220415_04_06_SS_Primary_EUF																		
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS							<0.5		<0.5									7.6
B04.02	SX_OB_20220415_04_17_SS_Primary_ALS																		
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																		
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																		
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																		
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS							<0.5		<0.5									7.8
B04.02	SX_OB_20220415_08_50_SS_Primary_ALS																		

		Halogenated Hydrocarbons					MAH					Solvents					SPOCAS	
		Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAV/c	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS						<0.5		<0.5									7.8
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																	
B04.02	SX_OB_20220415_12_04_SS_Primary_EUF																	

							Metals													
							Arsenic	Cadmium	Copper	Chromium (III-VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Zinc	
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							2	0.4	5	5	1	5	0.1	5	5	2	2	10	5	
Location Code	Field ID	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample														
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	14/04/2022	880598	MGT	Normal		58	<0.4	85	150	<1	7.3	<0.1	<5	240	<2	<2	<10	170	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	14/04/2022	880598	MGT	Field_D	M22-Ap0034684	44	<0.4	68	140	<1	5.8	<0.1	<5	210	<2	<2	<10	140	
RPD							27	0	22	7	0	23	0	0	13	0	0	0	19	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	14/04/2022	880598	MGT	Normal		58	<0.4	85	150	<1	7.3	<0.1	<5	240	<2	<2	<10	170	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034684	34	<1	58	110	<1.0	<5	<0.1	<5	174	<5	<2	<10	106	
RPD							52	0	38	31	0	37	0	0	32	0	0	0	46	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	14/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	14/04/2022	880598	MGT	Field_D	M22-Ap0034706														
RPD																				
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	14/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	14/04/2022	880598	MGT	Field_D	M22-Ap0034724														
RPD																				
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	14/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034724														
RPD																				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Normal		27	<1	52	100	<1.0	<5	<0.1	<5	153	<5	<2	<10	99	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959003	35	<1	60	100	<1.0	<5	<0.1	<5	164	<5	<2	<10	115	
RPD							26	0	14	0	0	0	0	0	7	0	0	0	15	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Normal		27	<1	52	100	<1.0	<5	<0.1	<5	153	<5	<2	<10	99	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	14/04/2022	880598	MGT	Interlab_D	EM2206959003	38	<0.4	60	130	<1	5.2	<0.1	<5	190	<2	<2	<10	130	
RPD							34	0	14	26	0	4	0	0	22	0	0	0	27	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Normal		27	<1	52	100	<1.0	<5	<0.1	<5	153	<5	<2	<10	99	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	14/04/2022	880598	MGT	Interlab_D	EM2206959003														
RPD																				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Normal															
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959021														
RPD																				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	14/04/2022	EM2206959	ALSE-Melbourne	Normal															
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	14/04/2022	880598	MGT	Interlab_D	EM2206959021														
RPD																				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	15/04/2022	880598	MGT	Normal		58	<0.4	86	180	<1	6.1	<0.1	<5	240	<2	<2	<10	150	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	15/04/2022	880598	MGT	Field_D	M22-Ap0034691	40	<0.4	58	130	<1	5.2	<0.1	<5	190	<2	<2	<10	110	
RPD							37	0	39	32	0	16	0	0	23	0	0	0	31	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	15/04/2022	880598	MGT	Normal		58	<0.4	86	180	<1	6.1	<0.1	<5	240	<2	<2	<10	150	
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034691	43	1	53	93	<1.0	<5	<0.1	<5	161	<5	<2	<10	84	
RPD							30	86	47	64	0	20	0	0	39	0	0	0	56	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	15/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	15/04/2022	880598	MGT	Field_D	M22-Ap0034711														
RPD																				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	15/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	15/04/2022	880598	MGT	Field_D	M22-Ap0034729														
RPD																				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	15/04/2022	880598	MGT	Normal															
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Interlab_D	M22-Ap0034729														
RPD																				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Normal		19	<1	35	82	<1.0	<5	<0.1	<5	105	<5	<2	<10	66	
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959014	17	<1	44	103	<1.0	<5	<0.1	<5	127	<5	<2	<10	82	
RPD							11	0	23	23	0	0	0	0	19	0	0	0	22	
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Normal		19	<1	35	82	<1.0	<5	<0.1	<5	105	<5	<2	<10	66	
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	15/04/2022	880598	MGT	Interlab_D	EM2206959014	25	<0.4	63	120	<1	7.3	<0.1	<5	180	<2	<2	<10	120	
RPD							27	0	57	38	0	37	0	0	53	0	0	0	58	
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Normal		19	<1	35	82	<1.0	<5	<0.1	<5	105	<5	<2	<10	66	
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	15/04/2022	880598	MGT	Interlab_D	EM2206959014														
RPD																				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Normal															
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Field_D	EM2206959032														
RPD																				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	15/04/2022	EM2206959	ALSE-Melbourne	Normal															
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	15/04/2022	880598	MGT	Interlab_D	EM2206959032														
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					TRH						TPH											
		Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (Fl. minus BTEX)	C10-C16	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	Aldrin + Dieldrin	DDD	DDT	4,4-DDE
EQL		0.1	0.1	0.1	0.2	0.3	20	20	50	50	100	100	50	20	20	50	50	50	0.05	0.05	0.05	0.05	0.05	0.05
Location Code	Field ID																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	470	310	780	<20	<50	180	400	580	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	160	110	270	<20	<50	<100	140	140	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	98	95	97	0	0	57	96	122	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	470	310	780	<20	<50	180	400	580	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	130	102	155	0	0	113	156	168	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	470	310	780	<20	<50	180	400	580	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

		Phenols																						
		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	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	3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		1	1	0.5	1	1	0.05	5	10	0.03	0.5	20	1	20	0.5	0.2	1	5	0.4	5	20	0.5	1	20
Location Code	Field ID																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20
RPD		0	0	0	0	0		0	0		0	0			0	0	0	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<10	<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

EQL	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEFOSA)		N-ethyl-perfluorooctanesulfonamide doacetic acid (NEFOSAA)		N-ethylperfluorooctanesulfonamide (NEFOSF)		N-Methyl perfluorooctane sulfonamide (MNEFOSA)		N-methylperfluorooctane sulfonamide doacetic acid (MNEFOSAA)		N-Methylperfluorooctanesulfonamideethanol (MNEFOSFE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic
	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	mg/L	mg/kg	mg/L
EQ	0.00001	0.005	0.00001	0.005	0.00005	0.01	0.00001	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	0.00005	0.005	0.00001
Location Code	Field ID																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																						
RPD	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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

EQL	Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropane sulfonic acid (PFPS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTriDA)		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)*		Sum of PFAS	Sum of PFAS	1,1-dichloroethane
	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	mg/L	mg/kg	mg/L
	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.0001	0.05	0.5
Location Code	Field ID																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																						
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																						
RPD	0																						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																						
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																						
RPD	0																						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																						
RPD	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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

		Chlorinated Hydrocarbons																						
		1,1-dichloroethene	1,1,2-trichloropropane	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	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
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	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																							
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	0	0	0	0	0	0	0	0	0	0	0	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

Location Code	Field ID	NA						PCBs										Inorganics						
		Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*	Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	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	
EQL		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.1	<100
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.9	<100
RPD		0	0	0	0	0	0	0			0	0	0	0	0	0	0	0					2	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.1	<100
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	32.2								<0.1	1.0	5.0	8.7	5.0		140
RPD			0			0	0	0										0						33
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF							<0.05															5.1	5.0
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF							<0.05															5.0	5.0
RPD								0															2	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF							<0.05															8.8	6.4
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF							<0.05															8.8	6.4
RPD								0															0	0
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF							<0.05															8.8	6.4
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS							<0.05	<0.05														9.5	
RPD																							8	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.9								<0.1	1.0	5.0	8.5	5.0		110
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	32.8								<0.1	1.0	5.0	8.6	5.0		130
RPD			0			0	0	0	0	3								0	0	0	1	0		17
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.9								<0.1	1.0	5.0	8.5	5.0		110
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.0	<100
RPD			0			0	0	0										0						10
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.9								<0.1	1.0	5.0	8.5	5.0		110
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF							<0.05															5.1	5.0
RPD								0															2	0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS							<0.05															9.4	
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS							<0.05															9.4	
RPD								0															0	
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS							<0.05															9.4	
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF							<0.05															8.9	6.4
RPD																							5	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.8	<100
RPD		0	0	0	0	0	0	0			0	0	0	0	0	0	0	0					1	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.9	<100
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	26.4								<0.1	1.1	5.0	9.2	5.0		140
RPD			0			0	0	0										0						33
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF							<0.05															5.0	5.0
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF							<0.05															5.0	5.0
RPD								0															0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF							<0.05															9.0	6.4
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF							<0.05															9.0	6.4
RPD								0															0	0
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF							<0.05															9.0	6.4
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS							<0.05															9.9	
RPD																							10	
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	30.7								<0.1	1.0	8.5	11.3	5.0		200
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.6								<0.1	1.0	9.1	11.3	5.0		190
RPD			0			0	0	0	0	9								0	0	7	0	0		5
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	30.7								<0.1	1.0	8.5	11.3	5.0		200
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					12	<100
RPD			0			0	0	0										0						67
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	30.7								<0.1	1.0	8.5	11.3	5.0		200
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF							<0.05															5.0	5.0
RPD								0															52	0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS							<0.05															12.0	
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS							<0.05															11.9	
RPD								0															1	
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS							<0.05															12.0	
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF							<0.05															11	6.4
RPD																							9	

*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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

Location Code	Field ID	Moisture Content (dried @ 103°C)	Cyanide Total	Halogenated Benzenes						Halogenated Hydrocarbons						MAH						Solvents		
				1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPA Vic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	0	0	0	0	0	0	0	0	0	0	0	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
RPD			0	0	0		0		0									0						
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF																							
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
RPD			0	0	0		0		0								0	0						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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						
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS																							
RPD																								
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS																							
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	27	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS		<5	<0.50	<0.50		<0.50		<0.50								<0.5	<0.5						
RPD			0	0	0		0		0									0						
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF																							
RPD																								
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF																							
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								4.0	4.0						
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS		<5	<0.50	<0.50		<0.50		<0.50								0.9	0.9						
RPD			0	0	0		0		0								127	127						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								4.0	4.0						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	36	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD			0	0	0		0		0									46						
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS		<5	<0.50	<0.50		<0.50		<0.50								4.0	4.0						
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS																							
RPD																								
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS																							
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF																							
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 multi;
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

	Carbon disulfide	Methyl Ethyl Ketone	SPOCAS
	mg/kg	mg/kg	pH (CaCl2)
EQL	0.5	0.5	0.1

Location Code	Field ID	Carbon disulfide	Methyl Ethyl Ketone	SPOCAS
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF	<0.5	<0.5	
RPD		0	0	
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF	<0.5	<0.5	
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS			7.7
RPD				
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF			
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF			
RPD				
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF			
B04.02	SX_OB_20220414_15_51_SS_Duplicate_EUF			
RPD				
B04.02	SX_OB_20220414_15_50_SS_Primary_EUF			
B04.02	SX_OB_20220414_15_52_SS_Triplicate_ALS			
RPD				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS			7.6
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS			7.6
RPD				0
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS			7.6
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF	<0.5	<0.5	
RPD				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS			7.6
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF			
RPD				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS			
B04.02	SX_OB_20220414_09_02_SS_Duplicate_ALS			
RPD				
B04.02	SX_OB_20220414_09_03_SS_Primary_ALS			
B04.02	SX_OB_20220414_09_04_SS_Triplicate_EUF			
RPD				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF	<0.5	<0.5	
RPD		0	0	
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF	<0.5	<0.5	
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS			7.8
RPD				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF			
B04.02	SX_OB_20220415_08_48_SS_Duplicate_EUF			
RPD				
B04.02	SX_OB_20220415_08_46_SS_Primary_EUF			
B04.02	SX_OB_20220415_08_50_SS_Triplicate_ALS			
RPD				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS			11.3
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS			11.3
RPD				0
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS			11.3
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF	<0.5	<0.5	
RPD				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS			11.3
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF			
RPD				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS			
E03.01	SX_IB_20220415_16_21_SS_Duplicate_ALS			
RPD				
E03.01	SX_IB_20220415_16_21_SS_Primary_ALS			
E03.01	SX_IB_20220415_16_22_SS_Triplicate_EUF			
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 multi)
 ***Interlab Duplicates are matched on a per compound basis as methods vary between laboratorie

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	B04.0220220502102538_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
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ATTACHMENT B: 95% UCL AVE CALCULATIONS

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.14/05/2022 10:11:54 AM								
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				23		Number of Distinct Observations				18	
15							Number of Missing Observations				0	
16	Minimum				27		Mean				41.13	
17	Maximum				67		Median				39	
18	SD				9.97		Std. Error of Mean				2.079	
19	Coefficient of Variation				0.242		Skewness				1.023	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.925		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value				0.914		Data appear Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.132		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.18		Data appear Normal at 5% Significance Level					
26	Data appear 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				44.7		95% Adjusted-CLT UCL (Chen-1995)				45.02	
31							95% Modified-t UCL (Johnson-1978)				44.77	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				0.335		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.742		Detected data appear Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.099		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value				0.181		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)				19.45		k star (bias corrected MLE)				16.94	
42	Theta hat (MLE)				2.115		Theta star (bias corrected MLE)				2.428	
43	nu hat (MLE)				894.8		nu star (bias corrected)				779.4	
44	MLE Mean (bias corrected)				41.13		MLE Sd (bias corrected)				9.992	
45							Approximate Chi Square Value (0.05)				715.6	
46	Adjusted Level of Significance				0.0389		Adjusted Chi Square Value				711.2	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50))				44.8		95% Adjusted Gamma UCL (use when n<50)				45.07	
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic				0.973		Shapiro Wilk Lognormal GOF Test					
53	5% Shapiro Wilk Critical Value				0.914		Data appear Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic				0.0891		Lilliefors Lognormal GOF Test					

	A	B	C	D	E	F	G	H	I	J	K	L
55	5% Lilliefors Critical Value					0.18	Data appear Lognormal at 5% Significance Level					
56	Data appear Lognormal at 5% Significance Level											
57												
58	Lognormal Statistics											
59	Minimum of Logged Data					3.296	Mean of logged Data					3.691
60	Maximum of Logged Data					4.205	SD of logged Data					0.229
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL					44.88	90% Chebyshev (MVUE) UCL					47.03
64	95% Chebyshev (MVUE) UCL					49.73	97.5% Chebyshev (MVUE) UCL					53.46
65	99% Chebyshev (MVUE) UCL					60.8						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data appear to follow a Discernible Distribution at 5% Significance Level											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL					44.55	95% Jackknife UCL					44.7
72	95% Standard Bootstrap UCL					44.46	95% Bootstrap-t UCL					45.51
73	95% Hall's Bootstrap UCL					45.55	95% Percentile Bootstrap UCL					44.52
74	95% BCA Bootstrap UCL					44.87						
75	90% Chebyshev(Mean, Sd) UCL					47.37	95% Chebyshev(Mean, Sd) UCL					50.19
76	97.5% Chebyshev(Mean, Sd) UCL					54.11	99% Chebyshev(Mean, Sd) UCL					61.81
77												
78	Suggested UCL to Use											
79	95% Student's-t UCL					44.7						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												
86												
87	Nickel											
88												
89	General Statistics											
90	Total Number of Observations					23	Number of Distinct Observations					17
91							Number of Missing Observations					0
92	Minimum					153	Mean					196.6
93	Maximum					320	Median					190
94	SD					38.13	Std. Error of Mean					7.951
95	Coefficient of Variation					0.194	Skewness					1.618
96												
97	Normal GOF Test											
98	Shapiro Wilk Test Statistic					0.86	Shapiro Wilk GOF Test					
99	5% Shapiro Wilk Critical Value					0.914	Data Not Normal at 5% Significance Level					
100	Lilliefors Test Statistic					0.2	Lilliefors GOF Test					
101	5% Lilliefors Critical Value					0.18	Data Not Normal at 5% Significance Level					
102	Data Not Normal at 5% Significance Level											
103												
104	Assuming Normal Distribution											
105	95% Normal UCL						95% UCLs (Adjusted for Skewness)					
106	95% Student's-t UCL					210.2	95% Adjusted-CLT UCL (Chen-1995)					212.5
107							95% Modified-t UCL (Johnson-1978)					210.7
108												

	A	B	C	D	E	F	G	H	I	J	K	L
109	Gamma GOF Test											
110	A-D Test Statistic				0.606		Anderson-Darling Gamma GOF Test					
111	5% A-D Critical Value				0.742		Detected data appear Gamma Distributed at 5% Significance Level					
112	K-S Test Statistic				0.181		Kolmogorov-Smirnov Gamma GOF Test					
113	5% K-S Critical Value				0.181		Data Not Gamma Distributed at 5% Significance Level					
114	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
115												
116	Gamma Statistics											
117	k hat (MLE)				31.7		k star (bias corrected MLE)				27.59	
118	Theta hat (MLE)				6.202		Theta star (bias corrected MLE)				7.125	
119	nu hat (MLE)				1458		nu star (bias corrected)				1269	
120	MLE Mean (bias corrected)				196.6		MLE Sd (bias corrected)				37.42	
121							Approximate Chi Square Value (0.05)				1187	
122	Adjusted Level of Significance				0.0389		Adjusted Chi Square Value				1182	
123												
124	Assuming Gamma Distribution											
125	95% Approximate Gamma UCL (use when n>=50)				210.1		95% Adjusted Gamma UCL (use when n<50)				211.1	
126												
127	Lognormal GOF Test											
128	Shapiro Wilk Test Statistic				0.921		Shapiro Wilk Lognormal GOF Test					
129	5% Shapiro Wilk Critical Value				0.914		Data appear Lognormal at 5% Significance Level					
130	Lilliefors Test Statistic				0.169		Lilliefors Lognormal GOF Test					
131	5% Lilliefors Critical Value				0.18		Data appear Lognormal at 5% Significance Level					
132	Data appear Lognormal at 5% Significance Level											
133												
134	Lognormal Statistics											
135	Minimum of Logged Data				5.03		Mean of logged Data				5.265	
136	Maximum of Logged Data				5.768		SD of logged Data				0.177	
137												
138	Assuming Lognormal Distribution											
139	95% H-UCL		210		90% Chebyshev (MVUE) UCL				218.3			
140	95% Chebyshev (MVUE) UCL		228.2		97.5% Chebyshev (MVUE) UCL				241.9			
141	99% Chebyshev (MVUE) UCL		268.9									
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		209.6		95% Jackknife UCL				210.2			
148	95% Standard Bootstrap UCL		209.3		95% Bootstrap-t UCL				214.7			
149	95% Hall's Bootstrap UCL		218.2		95% Percentile Bootstrap UCL				210.6			
150	95% BCA Bootstrap UCL		213.8									
151	90% Chebyshev(Mean, Sd) UCL		220.4		95% Chebyshev(Mean, Sd) UCL				231.2			
152	97.5% Chebyshev(Mean, Sd) UCL		246.2		99% Chebyshev(Mean, Sd) UCL				275.7			
153												
154	Suggested UCL to Use											
155	95% Adjusted Gamma UCL		211.1									
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).											

	A	B	C	D	E	F	G	H	I	J	K	L
163	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
164												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	B04.0220220502102538_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
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ATTACHMENT C: LABORATORY CERTIFICATES

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 **880598-L**
Project name **20220416063429-Eurofin-20**
Project ID **JC0927**
Received Date **Apr 16, 2022**

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_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- Ap0034702	M22- Ap0034703	M22- Ap0034704	M22- Ap0034705
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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	5.1	6.4
pH (off)	0.1	pH Units	5.2	5.1	7.4	5.3
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 (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	71	81	107	84
13C5-PFPeA (surr.)	1	%	83	88	105	88
13C5-PFHxA (surr.)	1	%	81	89	98	75
13C4-PFHpA (surr.)	1	%	83	84	114	87
13C8-PFOA (surr.)	1	%	87	87	110	66
13C5-PFNA (surr.)	1	%	77	82	119	77
13C6-PFDA (surr.)	1	%	58	69	127	53
13C2-PFUnDA (surr.)	1	%	69	81	84	37
13C2-PFDoDA (surr.)	1	%	52	56	104	28
13C2-PFTTeDA (surr.)	1	%	24	22	83	12

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_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- Ap0034702	M22- Ap0034703	M22- Ap0034704	M22- Ap0034705
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
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	%	86	83	142	38
D3-N-MeFOSA (surr.)	1	%	110	110	44	72
D5-N-EtFOSA (surr.)	1	%	159	150	52	53
D7-N-MeFOSE (surr.)	1	%	72	76	112	39
D9-N-EtFOSE (surr.)	1	%	81	81	112	50
D5-N-EtFOSAA (surr.)	1	%	22	24	92	28
D3-N-MeFOSAA (surr.)	1	%	29	35	140	13
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	79	90	99	81
18O2-PFHxS (surr.)	1	%	82	93	104	72
13C8-PFOS (surr.)	1	%	74	82	129	61
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	47	53	121	71
13C2-6:2 FTSA (surr.)	1	%	126	86	104	75
13C2-8:2 FTSA (surr.)	1	%	56	61	126	34
13C2-10:2 FTSA (surr.)	1	%	53	57	113	27
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_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_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- Ap0034706	M22- Ap0034707	M22- Ap0034708	M22- Ap0034709
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 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	5.1	5.0	5.0	5.0
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 (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	85	83	86
13C5-PFPeA (surr.)	1	%	89	92	101	93
13C5-PFHxA (surr.)	1	%	86	86	86	86
13C4-PFHpA (surr.)	1	%	83	83	81	86
13C8-PFOA (surr.)	1	%	87	84	86	87
13C5-PFNA (surr.)	1	%	81	77	85	80
13C6-PFDA (surr.)	1	%	72	63	73	59
13C2-PFUnDA (surr.)	1	%	79	66	89	60
13C2-PFDoDA (surr.)	1	%	61	41	63	39
13C2-PFTTeDA (surr.)	1	%	26	17	31	11
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	%	92	78	87	74
D3-N-MeFOSA (surr.)	1	%	118	53	94	53
D5-N-EtFOSA (surr.)	1	%	154	62	117	65
D7-N-MeFOSE (surr.)	1	%	78	63	80	59
D9-N-EtFOSE (surr.)	1	%	83	58	82	59
D5-N-EtFOSAA (surr.)	1	%	24	19	25	19
D3-N-MeFOSAA (surr.)	1	%	31	25	30	31

Client Sample ID			SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_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- Ap0034706	M22- Ap0034707	M22- Ap0034708	M22- Ap0034709
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
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	%	91	85	88	83
18O2-PFHxS (surr.)	1	%	91	84	99	85
13C8-PFOS (surr.)	1	%	85	78	94	79
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	49	54	60	60
13C2-6:2 FTSA (surr.)	1	%	79	66	67	61
13C2-8:2 FTSA (surr.)	1	%	66	60	69	62
13C2-10:2 FTSA (surr.)	1	%	74	52	94	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_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_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- Ap0034710	M22- Ap0034711	M22- Ap0034712	M22- Ap0034713
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	5.0	5.0	5.0	5.1

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_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- Ap0034710	M22- Ap0034711	M22- Ap0034712	M22- Ap0034713
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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 (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	86	87	88	88
13C5-PFPeA (surr.)	1	%	94	85	87	97
13C5-PFHxA (surr.)	1	%	85	85	86	85
13C4-PFHpA (surr.)	1	%	83	85	85	81
13C8-PFOA (surr.)	1	%	85	83	84	80
13C5-PFNA (surr.)	1	%	81	85	84	78
13C6-PFDA (surr.)	1	%	62	73	68	65
13C2-PFUnDA (surr.)	1	%	61	66	66	64
13C2-PFDoDA (surr.)	1	%	38	48	48	39
13C2-PFTTeDA (surr.)	1	%	13	19	18	13
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	%	81	85	84	83
D3-N-MeFOSA (surr.)	1	%	41	76	63	55
D5-N-EtFOSA (surr.)	1	%	45	93	75	74
D7-N-MeFOSE (surr.)	1	%	58	71	70	65
D9-N-EtFOSE (surr.)	1	%	57	71	69	68
D5-N-EtFOSAA (surr.)	1	%	16	29	20	20
D3-N-MeFOSAA (surr.)	1	%	29	33	32	31
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_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_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- Ap0034710	M22- Ap0034711	M22- Ap0034712	M22- Ap0034713
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	%	89	89	92	84
18O2-PFHxS (surr.)	1	%	83	84	90	84
13C8-PFOS (surr.)	1	%	78	75	82	74
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	58	54	65	59
13C2-6:2 FTSA (surr.)	1	%	60	64	57	59
13C2-8:2 FTSA (surr.)	1	%	62	66	71	70
13C2-10:2 FTSA (surr.)	1	%	52	58	57	50
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_IB_202204 15_16_22_SS _Triplicate_EUF	SX_OB_20220 415_16_28_SS _Primary_EUF	SX_OB_20220 415_16_49_SS _Primary_EUF	SX_OB_20220 415_20_10_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- Ap0034714	M22- Ap0034715	M22- Ap0034716	M22- Ap0034717
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	5.0	5.1	5.1	5.3
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

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_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- Ap0034714	M22- Ap0034715	M22- Ap0034716	M22- Ap0034717
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
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	%	87	87	85	91
13C5-PFPeA (surr.)	1	%	100	96	84	108
13C5-PFHxA (surr.)	1	%	85	88	83	87
13C4-PFHpA (surr.)	1	%	87	80	79	88
13C8-PFOA (surr.)	1	%	86	87	83	90
13C5-PFNA (surr.)	1	%	83	84	79	87
13C6-PFDA (surr.)	1	%	61	64	61	70
13C2-PFUnDA (surr.)	1	%	60	69	66	71
13C2-PFDoDA (surr.)	1	%	42	54	50	49
13C2-PFTeDA (surr.)	1	%	15	22	18	17
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	%	79	82	76	87
D3-N-MeFOSA (surr.)	1	%	69	90	92	68
D5-N-EtFOSA (surr.)	1	%	80	116	117	85
D7-N-MeFOSE (surr.)	1	%	66	73	72	76
D9-N-EtFOSE (surr.)	1	%	60	72	72	72
D5-N-EtFOSAA (surr.)	1	%	17	19	21	19
D3-N-MeFOSAA (surr.)	1	%	26	31	26	27
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	87	88	88	89
18O2-PFHxS (surr.)	1	%	83	86	79	82
13C8-PFOS (surr.)	1	%	72	85	79	82

Client Sample ID			SX_IB_202204_15_16_22_SS_Triplicate_EUF	SX_OB_20220415_16_28_SS_Primary_EUF	SX_OB_20220415_16_49_SS_Primary_EUF	SX_OB_20220415_20_10_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-Ap0034714	M22-Ap0034715	M22-Ap0034716	M22-Ap0034717
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	155	54	51	55
13C2-6:2 FTSA (surr.)	1	%	105	54	56	60
13C2-8:2 FTSA (surr.)	1	%	58	80	76	80
13C2-10:2 FTSA (surr.)	1	%	51	70	68	60
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_20220416_00_06_SS_Primary_EUF	SX_IB_20220416_04_24_SS_Primary_EUF	SX_OB_20220414_08_58_SS_Primary_EUF	SX_OB_20220414_09_04_SS_Triplicate_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ap0034718	M22-Ap0034719	M22-Ap0034720	M22-Ap0034721
Date Sampled			Apr 16, 2022	Apr 16, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	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	5.0	5.0	6.4	6.4
pH (off)	0.1	pH Units	5.3	9.7	9.3	8.9
Perfluoroalkyl carboxylic acids (PFCA)						
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 (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	91	92	94	97
13C5-PFPeA (surr.)	1	%	105	104	106	106

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF	SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0034718	M22- Ap0034719	M22- Ap0034720	M22- Ap0034721
Date Sampled			Apr 16, 2022	Apr 16, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFHxA (surr.)	1	%	88	73	88	93
13C4-PFHpA (surr.)	1	%	82	90	88	91
13C8-PFOA (surr.)	1	%	83	87	93	94
13C5-PFNA (surr.)	1	%	81	101	84	89
13C6-PFDA (surr.)	1	%	64	81	77	76
13C2-PFUnDA (surr.)	1	%	60	81	78	77
13C2-PFDoDA (surr.)	1	%	43	66	55	54
13C2-PFTeDA (surr.)	1	%	17	19	14	15
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	%	81	102	81	79
D3-N-MeFOSA (surr.)	1	%	58	134	73	71
D5-N-EtFOSA (surr.)	1	%	66	155	81	80
D7-N-MeFOSE (surr.)	1	%	73	87	66	55
D9-N-EtFOSE (surr.)	1	%	64	88	64	56
D5-N-EtFOSAA (surr.)	1	%	18	30	27	29
D3-N-MeFOSAA (surr.)	1	%	22	33	42	35
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	86	88	94	97
18O2-PFHxS (surr.)	1	%	84	85	89	87
13C8-PFOS (surr.)	1	%	74	85	91	92

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF	SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _TriPLICATE_EU F
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0034718	M22- Ap0034719	M22- Ap0034720	M22- Ap0034721
Date Sampled			Apr 16, 2022	Apr 16, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	57	152	63	93
13C2-6:2 FTSA (surr.)	1	%	58	147	60	68
13C2-8:2 FTSA (surr.)	1	%	78	75	101	137
13C2-10:2 FTSA (surr.)	1	%	54	69	59	58
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_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF	SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0034722	M22- Ap0034723	M22- Ap0034724	M22- Ap0034725
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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	6.4	6.4	6.4
pH (off)	0.1	pH Units	5.2	7.1	8.8	8.8
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 (PFTTrDA) ^{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	%	70	112	90	95

Client Sample ID			SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF	SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0034722	M22- Ap0034723	M22- Ap0034724	M22- Ap0034725
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	87	108	89	98
13C5-PFHxA (surr.)	1	%	73	103	87	89
13C4-PFHpA (surr.)	1	%	77	116	86	89
13C8-PFOA (surr.)	1	%	56	109	89	92
13C5-PFNA (surr.)	1	%	62	134	83	86
13C6-PFDA (surr.)	1	%	38	122	71	78
13C2-PFUnDA (surr.)	1	%	31	80	74	74
13C2-PFDoDA (surr.)	1	%	21	98	60	56
13C2-PFTeDA (surr.)	1	%	15	79	19	10
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	%	35	141	80	81
D3-N-MeFOSA (surr.)	1	%	95	147	67	75
D5-N-EtFOSA (surr.)	1	%	73	82	75	83
D7-N-MeFOSE (surr.)	1	%	41	111	63	59
D9-N-EtFOSE (surr.)	1	%	50	115	61	56
D5-N-EtFOSAA (surr.)	1	%	14	76	26	27
D3-N-MeFOSAA (surr.)	1	%	18	137	41	37
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	77	97	87	92
18O2-PFHxS (surr.)	1	%	67	110	83	90
13C8-PFOS (surr.)	1	%	52	121	85	89

Client Sample ID			SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF	SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0034722	M22- Ap0034723	M22- Ap0034724	M22- Ap0034725
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	54	118	63	65
13C2-6:2 FTSA (surr.)	1	%	58	128	60	65
13C2-8:2 FTSA (surr.)	1	%	25	130	137	141
13C2-10:2 FTSA (surr.)	1	%	23	122	63	65
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_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF	SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_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- Ap0034726	M22- Ap0034727	M22- Ap0034728	M22- Ap0034729
Date Sampled			Apr 14, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	8.9	8.7	8.9	9.0
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 (PFTTrDA) ^{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	%	96	93	92	95

Client Sample ID			SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF	SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_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- Ap0034726	M22- Ap0034727	M22- Ap0034728	M22- Ap0034729
Date Sampled			Apr 14, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	108	101	97	109
13C5-PFHxA (surr.)	1	%	91	85	84	91
13C4-PFHpA (surr.)	1	%	94	84	86	95
13C8-PFOA (surr.)	1	%	97	93	89	96
13C5-PFNA (surr.)	1	%	104	99	90	97
13C6-PFDA (surr.)	1	%	83	79	77	81
13C2-PFUnDA (surr.)	1	%	81	79	81	75
13C2-PFDoDA (surr.)	1	%	68	68	62	64
13C2-PFTeDA (surr.)	1	%	15	18	16	13
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	78	86	87
D3-N-MeFOSA (surr.)	1	%	72	63	69	75
D5-N-EtFOSA (surr.)	1	%	83	72	76	86
D7-N-MeFOSE (surr.)	1	%	70	64	58	65
D9-N-EtFOSE (surr.)	1	%	70	59	61	65
D5-N-EtFOSAA (surr.)	1	%	34	34	31	37
D3-N-MeFOSAA (surr.)	1	%	47	42	40	44
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	93	89	95	91
18O2-PFHxS (surr.)	1	%	87	89	86	94
13C8-PFOS (surr.)	1	%	91	89	91	81

Client Sample ID			SX_OB_20220414_20_09_SS_Primary_EUF	SX_OB_20220415_00_06_SS_Primary_EUF	SX_OB_20220415_04_06_SS_Primary_EUF	SX_OB_20220415_08_46_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-Ap0034726	M22-Ap0034727	M22-Ap0034728	M22-Ap0034729
Date Sampled			Apr 14, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	105	94	64	70
13C2-6:2 FTSA (surr.)	1	%	81	63	64	67
13C2-8:2 FTSA (surr.)	1	%	142	113	119	111
13C2-10:2 FTSA (surr.)	1	%	70	69	67	66
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_20220415_08_48_SS_Duplicate_EUF	SX_OB_20220415_12_04_SS_Primary_EUF	SX_IB_20220415_16_22_SS_Triplicate_EUF	SX_OB_20220415_16_28_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-Ap0034730	M22-Ap0034731	M22-Ap0034732	M22-Ap0034733
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	9.0	9.0	11	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 (PFTTrDA) ^{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	%	90	88	95	95

Client Sample ID			SX_OB_20220 415_08_48_SS Duplicate_EU F	SX_OB_20220 415_12_04_SS Primary_EUF	SX_IB_202204 15_16_22_SS Triplicate_EUF	SX_OB_20220 415_16_28_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- Ap0034730	M22- Ap0034731	M22- Ap0034732	M22- Ap0034733
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	104	93	105	101
13C5-PFHxA (surr.)	1	%	85	81	82	91
13C4-PFHpA (surr.)	1	%	90	84	91	92
13C8-PFOA (surr.)	1	%	93	87	96	97
13C5-PFNA (surr.)	1	%	89	91	95	97
13C6-PFDA (surr.)	1	%	75	72	74	82
13C2-PFUnDA (surr.)	1	%	77	77	79	78
13C2-PFDoDA (surr.)	1	%	65	62	60	63
13C2-PFTeDA (surr.)	1	%	17	19	14	15
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	%	88	84	101	79
D3-N-MeFOSA (surr.)	1	%	86	66	107	59
D5-N-EtFOSA (surr.)	1	%	90	70	127	67
D7-N-MeFOSE (surr.)	1	%	63	54	83	55
D9-N-EtFOSE (surr.)	1	%	62	58	80	55
D5-N-EtFOSAA (surr.)	1	%	34	30	16	30
D3-N-MeFOSAA (surr.)	1	%	45	39	22	40
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	88	84	89	93
18O2-PFHxS (surr.)	1	%	91	84	91	92
13C8-PFOS (surr.)	1	%	86	87	90	95

Client Sample ID			SX_OB_20220 415_08_48_SS _Duplicate_EUF	SX_OB_20220 415_12_04_SS _Primary_EUF	SX_IB_202204 15_16_22_SS _Triplicate_EUF	SX_OB_20220 415_16_28_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- Ap0034730	M22- Ap0034731	M22- Ap0034732	M22- Ap0034733
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	94	59	157	85
13C2-6:2 FTSA (surr.)	1	%	59	59	160	69
13C2-8:2 FTSA (surr.)	1	%	104	103	75	189
13C2-10:2 FTSA (surr.)	1	%	59	63	62	66
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_20220 415_16_49_SS _Primary_EUF	SX_OB_20220 415_20_10_SS _Primary_EUF	SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_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- Ap0034734	M22- Ap0034735	M22- Ap0034736	M22- Ap0034737
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 16, 2022	Apr 16, 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	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	9.3	8.9	8.9	11
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 (PFTTrDA) ^{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	%	96	95	95	92

Client Sample ID			SX_OB_20220 415_16_49_SS _Primary_EUF	SX_OB_20220 415_20_10_SS _Primary_EUF	SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_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- Ap0034734	M22- Ap0034735	M22- Ap0034736	M22- Ap0034737
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	105	104	94	91
13C5-PFHxA (surr.)	1	%	90	88	92	74
13C4-PFHpA (surr.)	1	%	91	85	91	92
13C8-PFOA (surr.)	1	%	96	96	96	93
13C5-PFNA (surr.)	1	%	97	94	95	100
13C6-PFDA (surr.)	1	%	84	82	76	81
13C2-PFUnDA (surr.)	1	%	81	80	80	84
13C2-PFDoDA (surr.)	1	%	68	66	69	76
13C2-PFTeDA (surr.)	1	%	17	19	17	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	%	82	86	85	98
D3-N-MeFOSA (surr.)	1	%	68	69	67	121
D5-N-EtFOSA (surr.)	1	%	73	79	79	152
D7-N-MeFOSE (surr.)	1	%	57	58	69	87
D9-N-EtFOSE (surr.)	1	%	57	62	63	89
D5-N-EtFOSAA (surr.)	1	%	32	31	38	23
D3-N-MeFOSAA (surr.)	1	%	47	45	47	37
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	94	85	88	88
18O2-PFHxS (surr.)	1	%	97	91	85	97
13C8-PFOS (surr.)	1	%	89	90	85	86

Client Sample ID			SX_OB_20220 415_16_49_SS _Primary_EUF	SX_OB_20220 415_20_10_SS _Primary_EUF	SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_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- Ap0034734	M22- Ap0034735	M22- Ap0034736	M22- Ap0034737
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	59	61	57	139
13C2-6:2 FTSA (surr.)	1	%	64	64	63	192
13C2-8:2 FTSA (surr.)	1	%	143	128	156	75
13C2-10:2 FTSA (surr.)	1	%	72	61	68	74
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

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) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 19, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 19, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 19, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 16, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 16, 2022 10:00 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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_20220414_08_58_S_S_Primary_EU_F	Apr 14, 2022	8:58AM	Soil	M22-Ap0034680		X	X	X
2	SX_OB_20220414_09_04_S_S_Triplicate_EUF	Apr 14, 2022	9:04AM	Soil	M22-Ap0034681		X	X	X
3	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	Soil	M22-Ap0034682		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)	IWRG 621 WQTP 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_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	Soil	M22-Ap0034683		X	X	X
5	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	Soil	M22-Ap0034684		X	X	X
6	SX_OB_20220414_15_51_S_S_Duplicate_EU_F	Apr 14, 2022	3:51PM	Soil	M22-Ap0034685		X	X	X
7	SX_OB_20220414_16_06_S	Apr 14, 2022	4:06PM	Water	M22-Ap0034686			X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	R_Rinsate_EU F								
8	SX_OB_20220 414_16_08_S B_Blank_EUF	Apr 14, 2022	4:08PM	Water	M22- Ap0034687		X		
9	SX_OB_20220 414_20_09_S S_Primary_EU F	Apr 14, 2022	8:09PM	Soil	M22- Ap0034688		X	X	X
10	SX_OB_20220 415_00_06_S S_Primary_EU F	Apr 15, 2022	12:06AM	Soil	M22- Ap0034689		X	X	X
11	SX_OB_20220	Apr 15, 2022	4:06AM	Soil	M22-		X	X	X

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Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
	415_04_06_S S_Primary_EU F				Ap0034690				
12	SX_OB_20220 415_08_46_S S_Primary_EU F	Apr 15, 2022	8:46AM	Soil	M22- Ap0034691		X	X	X
13	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	Soil	M22- Ap0034692		X	X	X
14	SX_OB_20220 415_12_04_S S_Primary_EU	Apr 15, 2022	12:04PM	Soil	M22- Ap0034693		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)	IWRG 621 WQTP 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									
	F								
15	SX_IB_20220415_16_22_SS_Triplicate_EU_F	Apr 15, 2022	4:22PM	Soil	M22-Ap0034694		X	X	X
16	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	Soil	M22-Ap0034695		X	X	X
17	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	Soil	M22-Ap0034696		X	X	X
18	SX_OB_20220	Apr 15, 2022	5:41PM	Water	M22-			X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	415_17_41_S R_Rinsate_EU F				Ap0034697				
19	SX_OB_20220 415_17_42_S B_Blank_EUF	Apr 15, 2022	5:42PM	Water	M22- Ap0034698			X	
20	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	Soil	M22- Ap0034699		X	X	X
21	SX_OB_20220 416_00_06_S S_Primary_EU F	Apr 16, 2022	12:06AM	Soil	M22- Ap0034700		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)	IWRG 621 WQTP 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									
22	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	Soil	M22-Ap0034701		X	X	X
23	SX_OB_20220414_08_58_S_Primary_EUF	Apr 14, 2022	8:58AM	AUS Leachate - pH 5.0	M22-Ap0034702	X		X	
24	SX_OB_20220414_09_04_S_Triplicate_EUF	Apr 14, 2022	9:04AM	AUS Leachate - pH 5.0	M22-Ap0034703	X		X	
25	SX_OB_20220414_12_01_S_Primary_EUF	Apr 14, 2022	12:01PM	AUS Leachate - pH 5.0	M22-Ap0034704	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
	F								
26	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - pH 5.0	M22-Ap0034705	X		X	
27	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - pH 5.0	M22-Ap0034706	X		X	
28	SX_OB_20220414_15_51_S_S_Duplicate_EUF	Apr 14, 2022	3:51PM	AUS Leachate - pH 5.0	M22-Ap0034707	X		X	
29	SX_OB_20220	Apr 14, 2022	8:09PM	AUS Leachate	M22-	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
29	SX_OB_20220414_20_09_S_S_Primary_EU_F	Apr 14, 2022	8:09PM	AUS Leachate - pH 5.0	M22-Ap0034708				
30	SX_OB_20220415_00_06_S_S_Primary_EU_F	Apr 15, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034709	X		X	
31	SX_OB_20220415_04_06_S_S_Primary_EU_F	Apr 15, 2022	4:06AM	AUS Leachate - pH 5.0	M22-Ap0034710	X		X	
32	SX_OB_20220415_08_46_S	Apr 15, 2022	8:46AM	AUS Leachate - pH 5.0	M22-Ap0034711	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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								
33	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	AUS Leachate - pH 5.0	M22- Ap0034712	X		X	
34	SX_OB_20220 415_12_04_S S_Primary_EU F	Apr 15, 2022	12:04PM	AUS Leachate - pH 5.0	M22- Ap0034713	X		X	
35	SX_IB_202204 15_16_22_SS TriPLICATE_EU F	Apr 15, 2022	4:22PM	AUS Leachate - pH 5.0	M22- Ap0034714	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220416063429-Eurofin-20
Project ID: JC0927

Order No.:
Report #: 880598
Phone: 08 8338 1009
Fax:

Received: Apr 16, 2022 10:00 AM
Due: Apr 22, 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)	IWRG 621 WQTP 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									
36	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	AUS Leachate - pH 5.0	M22-Ap0034715	X		X	
37	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	AUS Leachate - pH 5.0	M22-Ap0034716	X		X	
38	SX_OB_20220415_20_10_S_S_Primary_EU_F	Apr 15, 2022	8:10PM	AUS Leachate - pH 5.0	M22-Ap0034717	X		X	
39	SX_OB_20220416_00_06_S	Apr 16, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034718	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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								
40	SX_IB_202204 16_04_24_SS _Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - pH 5.0	M22- Ap0034719	X		X	
41	SX_OB_20220 414_08_58_S S_Primary_EU F	Apr 14, 2022	8:58AM	AUS Leachate - Reagent Water	M22- Ap0034720	X		X	
42	SX_OB_20220 414_09_04_S S_Triplicate_E UF	Apr 14, 2022	9:04AM	AUS Leachate - Reagent Water	M22- Ap0034721	X		X	
43	SX_OB_20220	Apr 14, 2022	12:01PM	AUS Leachate	M22-	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
43	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	AUS Leachate - Reagent Water	M22-Ap0034722				
44	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - Reagent Water	M22-Ap0034723	X		X	
45	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - Reagent Water	M22-Ap0034724	X		X	
46	SX_OB_20220414_15_51_S	Apr 14, 2022	3:51PM	AUS Leachate - Reagent	M22-Ap0034725	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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_Duplicate_EUF			Water					
47	SX_OB_20220414_20_09_S_S_Primary_EUF	Apr 14, 2022	8:09PM	AUS Leachate - Reagent Water	M22-Ap0034726	X		X	
48	SX_OB_20220415_00_06_S_S_Primary_EUF	Apr 15, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034727	X		X	
49	SX_OB_20220415_04_06_S_S_Primary_EUF	Apr 15, 2022	4:06AM	AUS Leachate - Reagent Water	M22-Ap0034728	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
50	SX_OB_20220415_08_46_S_S_Primary_EU_F	Apr 15, 2022	8:46AM	AUS Leachate - Reagent Water	M22-Ap0034729	X		X	
51	SX_OB_20220415_08_48_S_S_Duplicate_EU_F	Apr 15, 2022	8:48AM	AUS Leachate - Reagent Water	M22-Ap0034730	X		X	
52	SX_OB_20220415_12_04_S_S_Primary_EU_F	Apr 15, 2022	12:04PM	AUS Leachate - Reagent Water	M22-Ap0034731	X		X	
53	SX_IB_20220415_16_22_SS	Apr 15, 2022	4:22PM	AUS Leachate - Reagent	M22-Ap0034732	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	_TriPLICATE_EU F			Water					
54	SX_OB_20220 415_16_28_S S_Primary_EU F	Apr 15, 2022	4:28PM	AUS Leachate - Reagent Water	M22- Ap0034733	X		X	
55	SX_OB_20220 415_16_49_S S_Primary_EU F	Apr 15, 2022	4:49PM	AUS Leachate - Reagent Water	M22- Ap0034734	X		X	
56	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	AUS Leachate - Reagent Water	M22- Ap0034735	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
57	SX_OB_20220416_00_06_S_S_Primary_EU_F	Apr 16, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034736	X		X	
58	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - Reagent Water	M22-Ap0034737	X		X	
Test Counts						36	18	58	18

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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 (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 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.

QC Data General Comments

- 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.
- 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.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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)	%	90		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	108		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	98		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	91		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	88		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	100		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	100		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	103		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	104		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	97		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	102			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	107			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	128			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	98			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	103			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	91			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	107			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)								
Perfluorobutanesulfonic acid (PFBS)	%	93			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	84			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	81			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	83			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	88			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	86			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	69			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	111			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	134			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	94			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	97			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-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances								
				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034702	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-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034702	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034702	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034714	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034714	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034724	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034724	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034735	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034735	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

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

Qualifier Codes/Comments

Code	Description
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
Richard Corner	Senior Analyst (NSW)
Scott Beddoes	Senior Analyst (NSW)
Emily Rosenberg	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (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](#).

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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 **880598-S-V2**
Project name **20220416063429-Eurofin-20**
Project ID **JC0927**
Received Date **Apr 16, 2022**

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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	%	119	75	105	145
Toluene-d8 (surr.)	1	%	127	79	120	80
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_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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	%	55	56	61	65
p-Terphenyl-d14 (surr.)	1	%	67	70	60	70
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
Dibutylchloroendate (surr.)	1	%	76	75	65	78
Tetrachloro-m-xylene (surr.)	1	%	118	121	88	103

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 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
Dibutylchloroendate (surr.)	1	%	76	75	65	78
Tetrachloro-m-xylene (surr.)	1	%	118	121	88	103
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	%	50	51	53	52
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	2.4	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	390	370
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.3	8.0	6.9	7.9
% Moisture	1	%	29	35	30	32
Heavy Metals						
Arsenic	2	mg/kg	67	38	51	45
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	120	100
Copper	5	mg/kg	57	60	73	71
Lead	5	mg/kg	5.3	5.2	6.7	6.2
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _Triplicate_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	190	190	230	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	150	130	140	140
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	%	95	92	87	82
13C5-PFPeA (surr.)	1	%	88	86	110	110
13C5-PFHxA (surr.)	1	%	88	85	89	93
13C4-PFHpA (surr.)	1	%	88	86	92	82
13C8-PFOA (surr.)	1	%	85	85	94	89
13C5-PFNA (surr.)	1	%	64	71	82	82
13C6-PFDA (surr.)	1	%	79	81	107	89
13C2-PFUnDA (surr.)	1	%	97	93	106	132
13C2-PFDoDA (surr.)	1	%	63	66	73	81
13C2-PFTeDA (surr.)	1	%	73	62	68	78
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	%	111	95	92	93
D3-N-MeFOSA (surr.)	1	%	85	78	114	104
D5-N-EtFOSA (surr.)	1	%	96	91	129	116
D7-N-MeFOSE (surr.)	1	%	70	81	83	55
D9-N-EtFOSE (surr.)	1	%	90	77	99	90
D5-N-EtFOSAA (surr.)	1	%	87	109	94	89
D3-N-MeFOSAA (surr.)	1	%	68	53	80	72

Client Sample ID			SX_OB_20220 414_08_58_SS _Primary_EUF	SX_OB_20220 414_09_04_SS _TriPLICATE_EU F	SX_OB_20220 414_12_01_SS _Primary_EUF	SX_OB_20220 414_12_03_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034680	M22- Ap0034681	M22- Ap0034682	M22- Ap0034683
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 14, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
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	93	84
18O2-PFHxS (surr.)	1	%	84	66	81	68
13C8-PFOS (surr.)	1	%	67	60	87	96
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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	%	59	58	118	145
13C2-6:2 FTSA (surr.)	1	%	58	50	81	58
13C2-8:2 FTSA (surr.)	1	%	106	148	73	94
13C2-10:2 FTSA (surr.)	1	%	102	81	58	78
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_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 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

Client Sample ID			SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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
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

Client Sample ID			SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Volatiles Organics						
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	54	58	56
Toluene-d8 (surr.)	1	%	60	60	63	63
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	%	58	72	54	55
p-Terphenyl-d14 (surr.)	1	%	72	81	76	75

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 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	%	79	70	78	77
Tetrachloro-m-xylene (surr.)	1	%	123	96	108	126
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	%	79	70	78	77
Tetrachloro-m-xylene (surr.)	1	%	123	96	108	126
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

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 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	%	55	45	52	54
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.1	7.9	8.6	7.9
% Moisture						
% Moisture	1	%	32	35	35	35
Heavy Metals						
Arsenic	2	mg/kg	58	44	47	39
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	150	140	130	150
Copper	5	mg/kg	85	68	69	69
Lead	5	mg/kg	7.3	5.8	5.5	5.7
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	240	210	210	220
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	140	160	140
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	%	91	93	93	92
13C5-PFPeA (surr.)	1	%	91	88	83	89
13C5-PFHxA (surr.)	1	%	84	87	85	88

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	84	86	83	85
13C8-PFOA (surr.)	1	%	85	86	80	88
13C5-PFNA (surr.)	1	%	61	70	63	67
13C6-PFDA (surr.)	1	%	66	79	69	72
13C2-PFUnDA (surr.)	1	%	92	86	86	87
13C2-PFDoDA (surr.)	1	%	70	71	65	67
13C2-PFTeDA (surr.)	1	%	80	69	66	62
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	%	103	101	92	92
D3-N-MeFOSA (surr.)	1	%	77	79	87	78
D5-N-EtFOSA (surr.)	1	%	98	89	94	98
D7-N-MeFOSE (surr.)	1	%	73	76	79	69
D9-N-EtFOSE (surr.)	1	%	78	84	93	83
D5-N-EtFOSAA (surr.)	1	%	117	103	86	60
D3-N-MeFOSAA (surr.)	1	%	45	60	58	50
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	77	75	81	76
18O2-PFHxS (surr.)	1	%	63	84	77	60
13C8-PFOS (surr.)	1	%	82	77	90	69
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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	%	57	55	57	58
13C2-6:2 FTSA (surr.)	1	%	55	52	45	49

Client Sample ID			SX_OB_20220 414_15_50_SS _Primary_EUF	SX_OB_20220 414_15_51_SS _Duplicate_EU F	SX_OB_20220 414_20_09_SS _Primary_EUF	SX_OB_20220 415_00_06_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034684	M22- Ap0034685	M22- Ap0034688	M22- Ap0034689
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 14, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	137	133	130	117
13C2-10:2 FTSA (surr.)	1	%	65	71	84	87
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_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
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
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	%	57	58	68	68
Toluene-d8 (surr.)	1	%	62	65	73	72

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
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	%	52	74	69	52
p-Terphenyl-d14 (surr.)	1	%	78	77	76	67
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

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	74	67	69	59
Tetrachloro-m-xylene (surr.)	1	%	104	115	97	92
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	%	74	67	69	59
Tetrachloro-m-xylene (surr.)	1	%	104	115	97	92
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	%	54	53	45	49
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	2.6
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.3	8.9	8.8	8.5
% Moisture						
% Moisture	1	%	31	28	27	28

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	45	58	40	37
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	150	180	130	210
Copper	5	mg/kg	61	86	58	95
Lead	5	mg/kg	< 5	6.1	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	190	240	190	320
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	110	150	110	170
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 (PFTriDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	93	93	94	92
13C5-PFPeA (surr.)	1	%	95	82	88	87
13C5-PFHxA (surr.)	1	%	87	86	85	86
13C4-PFHpA (surr.)	1	%	89	91	91	84
13C8-PFOA (surr.)	1	%	84	80	75	84
13C5-PFNA (surr.)	1	%	81	66	70	64
13C6-PFDA (surr.)	1	%	80	83	93	90
13C2-PFUnDA (surr.)	1	%	110	104	106	91
13C2-PFDoDA (surr.)	1	%	83	69	79	81
13C2-PFTeDA (surr.)	1	%	64	78	94	82
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	%	87	99	99	91

Client Sample ID			SX_OB_20220 415_04_06_SS _Primary_EUF	SX_OB_20220 415_08_46_SS _Primary_EUF	SX_OB_20220 415_08_48_SS _Duplicate_EU F	SX_OB_20220 415_12_04_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034690	M22- Ap0034691	M22- Ap0034692	M22- Ap0034693
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D3-N-MeFOSA (surr.)	1	%	92	93	105	67
D5-N-EtFOSA (surr.)	1	%	97	98	100	101
D7-N-MeFOSE (surr.)	1	%	70	82	69	66
D9-N-EtFOSE (surr.)	1	%	86	85	88	79
D5-N-EtFOSAA (surr.)	1	%	83	95	118	82
D3-N-MeFOSAA (surr.)	1	%	41	49	71	58
Perfluoroalkyl sulfonic acids (PFASs)						
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	%	78	76	78	77
18O2-PFHxS (surr.)	1	%	77	68	84	88
13C8-PFOS (surr.)	1	%	68	63	71	76
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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	%	57	59	62	57
13C2-6:2 FTSA (surr.)	1	%	54	54	63	45
13C2-8:2 FTSA (surr.)	1	%	134	134	126	124
13C2-10:2 FTSA (surr.)	1	%	75	58	92	61
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_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 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	25	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	160	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	90	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	275	< 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	210	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	210	< 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

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
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	2.5	< 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	2.5	< 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	%	79	81	61	85
Toluene-d8 (surr.)	1	%	86	87	67	95
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

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	54	51	53	64
p-Terphenyl-d14 (surr.)	1	%	60	68	73	65
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
Dibutylchloroendate (surr.)	1	%	74	72	64	65
Tetrachloro-m-xylene (surr.)	1	%	94	105	94	108
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
Dibutylchloroendate (surr.)	1	%	74	72	64	65
Tetrachloro-m-xylene (surr.)	1	%	94	105	94	108
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

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
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	%	39	40	51	46
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	1.1	1.6	2.1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	12	7.7	8.7	8.4
% Moisture						
% Moisture	1	%	36	34	31	34
Heavy Metals						
Arsenic	2	mg/kg	25	43	53	42
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	190	170	170
Copper	5	mg/kg	63	77	63	71
Lead	5	mg/kg	7.3	6.9	6.5	7.5
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	180	240	200	220
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	150	120	140
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

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS _Primary_EUF	SX_OB_20220 415_16_49_SS _Primary_EUF	SX_OB_20220 415_20_10_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	93	87	89	88
13C5-PFPeA (surr.)	1	%	98	88	84	84
13C5-PFHxA (surr.)	1	%	80	81	85	85
13C4-PFHpA (surr.)	1	%	83	83	89	83
13C8-PFOA (surr.)	1	%	64	79	86	77
13C5-PFNA (surr.)	1	%	70	65	58	73
13C6-PFDA (surr.)	1	%	77	59	77	67
13C2-PFUnDA (surr.)	1	%	78	104	120	76
13C2-PFDoDA (surr.)	1	%	99	82	87	89
13C2-PFTTeDA (surr.)	1	%	80	66	77	68
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	%	96	90	89	90
D3-N-MeFOSA (surr.)	1	%	77	78	86	78
D5-N-EtFOSA (surr.)	1	%	109	91	85	85
D7-N-MeFOSE (surr.)	1	%	74	59	64	71
D9-N-EtFOSE (surr.)	1	%	88	75	88	74
D5-N-EtFOSAA (surr.)	1	%	67	88	113	79
D3-N-MeFOSAA (surr.)	1	%	22	47	57	53
Perfluoroalkyl sulfonic acids (PFSA)						
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	%	66	73	78	73
18O2-PFHxS (surr.)	1	%	43	66	73	75
13C8-PFOS (surr.)	1	%	105	73	65	66

Client Sample ID			SX_IB_202204 15_16_22_SS TriPLICATE_EUF	SX_OB_20220 415_16_28_SS Primary_EUF	SX_OB_20220 415_16_49_SS Primary_EUF	SX_OB_20220 415_20_10_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0034694	M22- Ap0034695	M22- Ap0034696	M22- Ap0034699
Date Sampled			Apr 15, 2022	Apr 15, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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	%	64	53	57	53
13C2-6:2 FTSA (surr.)	1	%	79	54	51	50
13C2-8:2 FTSA (surr.)	1	%	126	118	138	138
13C2-10:2 FTSA (surr.)	1	%	17	42	45	47
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_20220 416_00_06_SS Primary_EUF	SX_IB_202204 16_04_24_SS Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100
Volatile Organics				
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Volatile Organics				
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Volatile Organics				
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	83	80
Toluene-d8 (surr.)	1	%	77	121
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	53	53
p-Terphenyl-d14 (surr.)	1	%	67	60
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	69	71
Tetrachloro-m-xylene (surr.)	1	%	112	106
Polychlorinated Biphenyls				
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	69	71
Tetrachloro-m-xylene (surr.)	1	%	112	106
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	49	40
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Chromium (hexavalent)	1	mg/kg	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.2	11
% Moisture	1	%	31	39
Heavy Metals				
Arsenic	2	mg/kg	53	28
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	200	150
Copper	5	mg/kg	85	56
Lead	5	mg/kg	7.2	7.2
Mercury	0.1	mg/kg	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5
Nickel	5	mg/kg	250	170
Selenium	2	mg/kg	< 2	< 2
Silver	2	mg/kg	< 2	< 2
Tin	10	mg/kg	< 10	< 10
Zinc	5	mg/kg	170	120
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorotridecanoic acid (PFTeDA) ^{N15}	5	ug/kg	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5
13C4-PFBA (surr.)	1	%	91	88
13C5-PFPeA (surr.)	1	%	85	86
13C5-PFHxA (surr.)	1	%	86	66
13C4-PFHpA (surr.)	1	%	85	84
13C8-PFOA (surr.)	1	%	75	58
13C5-PFNA (surr.)	1	%	72	92
13C6-PFDA (surr.)	1	%	86	69
13C2-PFUnDA (surr.)	1	%	109	79
13C2-PFDoDA (surr.)	1	%	93	86
13C2-PFTeDA (surr.)	1	%	79	63
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5

Client Sample ID			SX_OB_20220 416_00_06_SS _Primary_EUF	SX_IB_202204 16_04_24_SS _Primary_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- Ap0034700	M22- Ap0034701
Date Sampled			Apr 16, 2022	Apr 16, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10
13C8-FOSA (surr.)	1	%	94	85
D3-N-MeFOSA (surr.)	1	%	77	63
D5-N-EtFOSA (surr.)	1	%	98	92
D7-N-MeFOSE (surr.)	1	%	69	68
D9-N-EtFOSE (surr.)	1	%	89	78
D5-N-EtFOSAA (surr.)	1	%	90	53
D3-N-MeFOSAA (surr.)	1	%	60	36
Perfluoroalkyl sulfonic acids (PFASs)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5
13C3-PFBS (surr.)	1	%	79	64
18O2-PFHxS (surr.)	1	%	56	53
13C8-PFOS (surr.)	1	%	67	90
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	54	67
13C2-6:2 FTSA (surr.)	1	%	60	106
13C2-8:2 FTSA (surr.)	1	%	124	119
13C2-10:2 FTSA (surr.)	1	%	57	31
PFASs Summations				
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 19, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 19, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 19, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	Apr 19, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	May 03, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 19, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	Apr 19, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	Apr 19, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 19, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 19, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4230 Hexavalent Chromium by UV-Vis - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	Apr 19, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	Apr 19, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE	Melbourne	Apr 20, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	Apr 19, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Apr 19, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	Apr 16, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 19, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 16, 2022	

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Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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_20220414_08_58_S_S_Primary_EU_F	Apr 14, 2022	8:58AM	Soil	M22-Ap0034680		X	X	X
2	SX_OB_20220414_09_04_S_S_Triplicate_EUF	Apr 14, 2022	9:04AM	Soil	M22-Ap0034681		X	X	X
3	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	Soil	M22-Ap0034682		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)	IWRG 621 WQTP 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_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	Soil	M22-Ap0034683		X	X	X
5	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	Soil	M22-Ap0034684		X	X	X
6	SX_OB_20220414_15_51_S_S_Duplicate_EUF	Apr 14, 2022	3:51PM	Soil	M22-Ap0034685		X	X	X
7	SX_OB_20220414_16_06_S	Apr 14, 2022	4:06PM	Water	M22-Ap0034686			X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	R_Rinsate_EU F								
8	SX_OB_20220 414_16_08_S B_Blank_EUF	Apr 14, 2022	4:08PM	Water	M22- Ap0034687			X	
9	SX_OB_20220 414_20_09_S S_Primary_EU F	Apr 14, 2022	8:09PM	Soil	M22- Ap0034688		X	X	X
10	SX_OB_20220 415_00_06_S S_Primary_EU F	Apr 15, 2022	12:06AM	Soil	M22- Ap0034689		X	X	X
11	SX_OB_20220	Apr 15, 2022	4:06AM	Soil	M22-		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)	IWRG 621 WQTP 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									
	415_04_06_S S_Primary_EU F				Ap0034690				
12	SX_OB_20220 415_08_46_S S_Primary_EU F	Apr 15, 2022	8:46AM	Soil	M22- Ap0034691		X	X	X
13	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	Soil	M22- Ap0034692		X	X	X
14	SX_OB_20220 415_12_04_S S_Primary_EU	Apr 15, 2022	12:04PM	Soil	M22- Ap0034693		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)	IWRG 621 WQTP 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									
	F								
15	SX_IB_20220415_16_22_SS_Triplicate_EU_F	Apr 15, 2022	4:22PM	Soil	M22-Ap0034694		X	X	X
16	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	Soil	M22-Ap0034695		X	X	X
17	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	Soil	M22-Ap0034696		X	X	X
18	SX_OB_20220	Apr 15, 2022	5:41PM	Water	M22-			X	

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Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
	415_17_41_S R_Rinsate_EU F				Ap0034697				
19	SX_OB_20220 415_17_42_S B_Blank_EUF	Apr 15, 2022	5:42PM	Water	M22- Ap0034698			X	
20	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	Soil	M22- Ap0034699		X	X	X
21	SX_OB_20220 416_00_06_S S_Primary_EU F	Apr 16, 2022	12:06AM	Soil	M22- Ap0034700		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)	IWRG 621 WQTP 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									
22	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	Soil	M22-Ap0034701		X	X	X
23	SX_OB_20220414_08_58_S_Primary_EUF	Apr 14, 2022	8:58AM	AUS Leachate - pH 5.0	M22-Ap0034702	X		X	
24	SX_OB_20220414_09_04_S_Triplicate_EUF	Apr 14, 2022	9:04AM	AUS Leachate - pH 5.0	M22-Ap0034703	X		X	
25	SX_OB_20220414_12_01_S_Primary_EUF	Apr 14, 2022	12:01PM	AUS Leachate - pH 5.0	M22-Ap0034704	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
	F								
26	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - pH 5.0	M22-Ap0034705	X		X	
27	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - pH 5.0	M22-Ap0034706	X		X	
28	SX_OB_20220414_15_51_S_S_Duplicate_EUF	Apr 14, 2022	3:51PM	AUS Leachate - pH 5.0	M22-Ap0034707	X		X	
29	SX_OB_20220	Apr 14, 2022	8:09PM	AUS Leachate	M22-	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
29	SX_OB_20220414_20_09_S_S_Primary_EU_F	Apr 14, 2022	8:09PM	AUS Leachate - pH 5.0	M22-Ap0034708				
30	SX_OB_20220415_00_06_S_S_Primary_EU_F	Apr 15, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034709	X		X	
31	SX_OB_20220415_04_06_S_S_Primary_EU_F	Apr 15, 2022	4:06AM	AUS Leachate - pH 5.0	M22-Ap0034710	X		X	
32	SX_OB_20220415_08_46_S	Apr 15, 2022	8:46AM	AUS Leachate - pH 5.0	M22-Ap0034711	X		X	

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SA 5063

Project Name: 20220416063429-Eurofin-20
Project ID: JC0927

Order No.:
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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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								
33	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	AUS Leachate - pH 5.0	M22- Ap0034712	X		X	
34	SX_OB_20220 415_12_04_S S_Primary_EU F	Apr 15, 2022	12:04PM	AUS Leachate - pH 5.0	M22- Ap0034713	X		X	
35	SX_IB_202204 15_16_22_SS TriPLICATE_EU F	Apr 15, 2022	4:22PM	AUS Leachate - pH 5.0	M22- Ap0034714	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
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SA 5063

Project Name: 20220416063429-Eurofin-20
Project ID: JC0927

Order No.:
Report #: 880598
Phone: 08 8338 1009
Fax:

Received: Apr 16, 2022 10:00 AM
Due: Apr 22, 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)	IWRG 621 WQTP 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									
36	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	AUS Leachate - pH 5.0	M22-Ap0034715	X		X	
37	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	AUS Leachate - pH 5.0	M22-Ap0034716	X		X	
38	SX_OB_20220415_20_10_S_S_Primary_EU_F	Apr 15, 2022	8:10PM	AUS Leachate - pH 5.0	M22-Ap0034717	X		X	
39	SX_OB_20220416_00_06_S	Apr 16, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034718	X		X	

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Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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								
40	SX_IB_202204 16_04_24_SS _Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - pH 5.0	M22- Ap0034719	X		X	
41	SX_OB_20220 414_08_58_S S_Primary_EU F	Apr 14, 2022	8:58AM	AUS Leachate - Reagent Water	M22- Ap0034720	X		X	
42	SX_OB_20220 414_09_04_S S_Triplicate_E UF	Apr 14, 2022	9:04AM	AUS Leachate - Reagent Water	M22- Ap0034721	X		X	
43	SX_OB_20220	Apr 14, 2022	12:01PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 16, 2022 10:00 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
43	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	AUS Leachate - Reagent Water	M22-Ap0034722				
44	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - Reagent Water	M22-Ap0034723	X		X	
45	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - Reagent Water	M22-Ap0034724	X		X	
46	SX_OB_20220414_15_51_S	Apr 14, 2022	3:51PM	AUS Leachate - Reagent	M22-Ap0034725	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220416063429-Eurofin-20
Project ID: JC0927

Order No.:
Report #: 880598
Phone: 08 8338 1009
Fax:

Received: Apr 16, 2022 10:00 AM
Due: Apr 22, 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)	IWRG 621 WQTP 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_Duplicate_EUF			Water					
47	SX_OB_20220414_20_09_S_S_Primary_EUF	Apr 14, 2022	8:09PM	AUS Leachate - Reagent Water	M22-Ap0034726	X		X	
48	SX_OB_20220415_00_06_S_S_Primary_EUF	Apr 15, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034727	X		X	
49	SX_OB_20220415_04_06_S_S_Primary_EUF	Apr 15, 2022	4:06AM	AUS Leachate - Reagent Water	M22-Ap0034728	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 16, 2022 10:00 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
50	SX_OB_20220415_08_46_S_S_Primary_EU_F	Apr 15, 2022	8:46AM	AUS Leachate - Reagent Water	M22-Ap0034729	X		X	
51	SX_OB_20220415_08_48_S_S_Duplicate_EU_F	Apr 15, 2022	8:48AM	AUS Leachate - Reagent Water	M22-Ap0034730	X		X	
52	SX_OB_20220415_12_04_S_S_Primary_EU_F	Apr 15, 2022	12:04PM	AUS Leachate - Reagent Water	M22-Ap0034731	X		X	
53	SX_IB_20220415_16_22_SS	Apr 15, 2022	4:22PM	AUS Leachate - Reagent	M22-Ap0034732	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 16, 2022 10:00 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
	_TriPLICATE_EU F			Water					
54	SX_OB_20220 415_16_28_S S_Primary_EU F	Apr 15, 2022	4:28PM	AUS Leachate - Reagent Water	M22- Ap0034733	X		X	
55	SX_OB_20220 415_16_49_S S_Primary_EU F	Apr 15, 2022	4:49PM	AUS Leachate - Reagent Water	M22- Ap0034734	X		X	
56	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	AUS Leachate - Reagent Water	M22- Ap0034735	X		X	

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

Project Name: 20220416063429-Eurofin-20
Project ID: JC0927

Order No.:
Report #: 880598
Phone: 08 8338 1009
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Received: Apr 16, 2022 10:00 AM
Due: Apr 22, 2022
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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)	IWRG 621 WQTP 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									
57	SX_OB_20220416_00_06_S_S_Primary_EU_F	Apr 16, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034736	X		X	
58	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - Reagent Water	M22-Ap0034737	X		X	
Test Counts						36	18	58	18

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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 (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPaA, 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.

QC Data General Comments

- 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.
- 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.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
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 FTSA)						
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	%	92		70-130	Pass	
TRH C10-C14	%	120		70-130	Pass	
Naphthalene	%	85		70-130	Pass	
TRH C6-C10	%	89		70-130	Pass	
TRH >C10-C16	%	118		70-130	Pass	
LCS - % Recovery						
Volatile Organics						
1.1-Dichloroethene	%	77		70-130	Pass	
1.1.1-Trichloroethane	%	76		70-130	Pass	
1.2-Dichlorobenzene	%	90		70-130	Pass	
1.2-Dichloroethane	%	107		70-130	Pass	
Benzene	%	105		70-130	Pass	
Ethylbenzene	%	98		70-130	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	95		70-130	Pass	
Toluene	%	100		70-130	Pass	
Trichloroethene	%	104		70-130	Pass	
Xylenes - Total*	%	95		70-130	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	%	100		70-130	Pass	
Acenaphthylene	%	108		70-130	Pass	
Anthracene	%	89		70-130	Pass	
Benz(a)anthracene	%	84		70-130	Pass	
Benzo(a)pyrene	%	95		70-130	Pass	
Benzo(b&j)fluoranthene	%	72		70-130	Pass	
Benzo(g,h,i)perylene	%	89		70-130	Pass	
Benzo(k)fluoranthene	%	96		70-130	Pass	
Chrysene	%	98		70-130	Pass	
Dibenz(a,h)anthracene	%	87		70-130	Pass	
Fluoranthene	%	89		70-130	Pass	
Fluorene	%	98		70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	88		70-130	Pass	
Naphthalene	%	95		70-130	Pass	
Phenanthrene	%	86		70-130	Pass	
Pyrene	%	91		70-130	Pass	
LCS - % Recovery						
Organochlorine Pesticides						
Chlordanes - Total	%	80		70-130	Pass	
4,4'-DDD	%	123		70-130	Pass	
4,4'-DDE	%	97		70-130	Pass	
4,4'-DDT	%	123		70-130	Pass	
a-HCH	%	74		70-130	Pass	
Aldrin	%	75		70-130	Pass	
b-HCH	%	84		70-130	Pass	
d-HCH	%	97		70-130	Pass	
Dieldrin	%	77		70-130	Pass	
Endosulfan I	%	73		70-130	Pass	
Endosulfan II	%	77		70-130	Pass	
Endosulfan sulphate	%	86		70-130	Pass	
Endrin	%	83		70-130	Pass	
Endrin ketone	%	85		70-130	Pass	
g-HCH (Lindane)	%	76		70-130	Pass	
Heptachlor	%	81		70-130	Pass	
Heptachlor epoxide	%	82		70-130	Pass	
Hexachlorobenzene	%	89		70-130	Pass	
Methoxychlor	%	123		70-130	Pass	
LCS - % Recovery						
Polychlorinated Biphenyls						
Aroclor-1260	%	121		70-130	Pass	
LCS - % Recovery						
Phenols (Halogenated)						
2-Chlorophenol	%	92		25-140	Pass	
2,4-Dichlorophenol	%	96		25-140	Pass	
2,4,5-Trichlorophenol	%	95		25-140	Pass	
2,4,6-Trichlorophenol	%	81		25-140	Pass	
2,6-Dichlorophenol	%	92		25-140	Pass	
4-Chloro-3-methylphenol	%	93		25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pentachlorophenol	%	66			25-140	Pass	
Tetrachlorophenols - Total	%	76			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	%	42			25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	52			25-140	Pass	
2-Nitrophenol	%	85			25-140	Pass	
2,4-Dimethylphenol	%	88			25-140	Pass	
2,4-Dinitrophenol	%	30			25-140	Pass	
2-Methylphenol (o-Cresol)	%	75			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	89			25-140	Pass	
4-Nitrophenol	%	68			25-140	Pass	
Dinoseb	%	60			25-140	Pass	
Phenol	%	87			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	87			70-130	Pass	
Cyanide (total)	%	106			70-130	Pass	
Fluoride (Total)	%	73			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			80-120	Pass	
Cadmium	%	94			80-120	Pass	
Chromium	%	102			80-120	Pass	
Copper	%	102			80-120	Pass	
Lead	%	113			80-120	Pass	
Mercury	%	103			80-120	Pass	
Molybdenum	%	110			80-120	Pass	
Nickel	%	95			80-120	Pass	
Selenium	%	105			80-120	Pass	
Silver	%	100			80-120	Pass	
Tin	%	110			80-120	Pass	
Zinc	%	101			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	86			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	92			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	87			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	87			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	85			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	114			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	115			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	103			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	103			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	107			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	91			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	78			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	94			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)	%	99			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	84			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	117			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)								
Perfluorobutanesulfonic acid (PFBS)	%	83			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	140			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	107			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	90			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	77			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	62			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	98			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	117			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	97			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	97			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	89			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
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C10-C14	M22-Ap0029972	NCP	%	98		70-130	Pass	
TRH >C10-C16	M22-Ap0029972	NCP	%	102		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-Ap0030617	NCP	%	101		70-130	Pass	
Acenaphthylene	M22-Ap0030617	NCP	%	72		70-130	Pass	
Anthracene	M22-Ap0030617	NCP	%	91		70-130	Pass	
Benz(a)anthracene	M22-Ap0030617	NCP	%	91		70-130	Pass	
Benzo(a)pyrene	M22-Ap0030617	NCP	%	96		70-130	Pass	
Benzo(b&i)fluoranthene	M22-Ap0030617	NCP	%	75		70-130	Pass	
Benzo(g,h,i)perylene	M22-Ap0030617	NCP	%	90		70-130	Pass	
Benzo(k)fluoranthene	M22-Ap0030617	NCP	%	92		70-130	Pass	
Chrysene	M22-Ap0030617	NCP	%	103		70-130	Pass	
Dibenz(a,h)anthracene	M22-Ap0030617	NCP	%	88		70-130	Pass	
Fluoranthene	M22-Ap0030617	NCP	%	96		70-130	Pass	
Fluorene	M22-Ap0030617	NCP	%	101		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-Ap0030617	NCP	%	91		70-130	Pass	
Naphthalene	M22-Ap0030617	NCP	%	98		70-130	Pass	
Phenanthrene	M22-Ap0030617	NCP	%	87		70-130	Pass	
Pyrene	M22-Ap0030617	NCP	%	99		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-Ap0030617	NCP	%	64		30-130	Pass	
2,4-Dichlorophenol	M22-Ap0030617	NCP	%	71		30-130	Pass	
2,4,5-Trichlorophenol	M22-Ap0030617	NCP	%	78		30-130	Pass	
2,4,6-Trichlorophenol	M22-Ap0030617	NCP	%	61		30-130	Pass	
2,6-Dichlorophenol	M22-Ap0030617	NCP	%	70		30-130	Pass	
4-Chloro-3-methylphenol	M22-Ap0030617	NCP	%	68		30-130	Pass	
Pentachlorophenol	M22-Ap0030617	NCP	%	51		30-130	Pass	
Tetrachlorophenols - Total	M22-Ap0030617	NCP	%	62		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-Ap0030617	NCP	%	55		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-Ap0030617	NCP	%	39		30-130	Pass	
2-Nitrophenol	M22-Ap0030617	NCP	%	60		30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
2,4-Dimethylphenol	M22-Ap0030617	NCP	%	72		30-130	Pass	
2,4-Dinitrophenol	M22-Ap0024169	NCP	%	43		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ap0030617	NCP	%	55		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ap0030617	NCP	%	64		30-130	Pass	
4-Nitrophenol	M22-Ap0030617	NCP	%	54		30-130	Pass	
Dinoseb	M22-Ap0030617	NCP	%	51		30-130	Pass	
Phenol	M22-Ap0030617	NCP	%	61		30-130	Pass	
Spike - % Recovery								
				Result 1				
Cyanide (total)	M22-Ap0003158	NCP	%	91		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-Ap0024716	NCP	%	124		75-125	Pass	
Cadmium	M22-Ap0024716	NCP	%	99		75-125	Pass	
Chromium	M22-Ap0024716	NCP	%	114		75-125	Pass	
Copper	M22-Ap0024716	NCP	%	121		75-125	Pass	
Lead	M22-Ap0024716	NCP	%	118		75-125	Pass	
Mercury	M22-Ap0024716	NCP	%	120		75-125	Pass	
Molybdenum	M22-Ap0024716	NCP	%	120		75-125	Pass	
Nickel	M22-Ap0024716	NCP	%	120		75-125	Pass	
Selenium	M22-Ap0024716	NCP	%	116		75-125	Pass	
Silver	M22-Ap0024716	NCP	%	104		75-125	Pass	
Tin	M22-Ap0024716	NCP	%	130		75-125	Fail	Q08
Zinc	M22-Ap0024716	NCP	%	119		75-125	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-Ap0034271	NCP	%	88		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ap0034271	NCP	%	89		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ap0034271	NCP	%	87		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034271	NCP	%	90		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ap0034271	NCP	%	97		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ap0034271	NCP	%	100		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ap0034271	NCP	%	97		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034271	NCP	%	108		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034271	NCP	%	100		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-Ap0034271	NCP	%	109		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0034271	NCP	%	104		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034271	NCP	%	103		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034271	NCP	%	102		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034271	NCP	%	114		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034271	NCP	%	86		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034271	NCP	%	93		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0034271	NCP	%	78		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034271	NCP	%	84		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034271	NCP	%	83		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034271	NCP	%	123		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034271	NCP	%	105		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034271	NCP	%	84		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034271	NCP	%	82		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034271	NCP	%	63		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034271	NCP	%	92		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034271	NCP	%	119		50-150	Pass	
Spike - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034271	NCP	%	97		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034271	NCP	%	94		50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034271	NCP	%	94		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034271	NCP	%	72		50-150	Pass	
Spike - % Recovery								
				Result 1				
Chromium (hexavalent)	M22-Ap0035967	NCP	%	87		70-130	Pass	
Spike - % Recovery								
				Result 1				
Fluoride (Total)	M22-Ap0034685	CP	%	77		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C6-C9	M22-Ap0034693	CP	%	109		70-130	Pass	
Naphthalene	M22-Ap0034693	CP	%	96		70-130	Pass	
TRH C6-C10	M22-Ap0034693	CP	%	104		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
1.1-Dichloroethene	M22-Ap0034693	CP	%	90		70-130	Pass	
1.1.1-Trichloroethane	M22-Ap0034693	CP	%	77		70-130	Pass	
1.2-Dichlorobenzene	M22-Ap0034693	CP	%	103		70-130	Pass	
1.2-Dichloroethane	M22-Ap0034693	CP	%	113		70-130	Pass	
Benzene	M22-Ap0034693	CP	%	107		70-130	Pass	
Ethylbenzene	M22-Ap0034693	CP	%	109		70-130	Pass	
m&p-Xylenes	M22-Ap0034693	CP	%	107		70-130	Pass	
o-Xylene	M22-Ap0034693	CP	%	107		70-130	Pass	
Toluene	M22-Ap0034693	CP	%	109		70-130	Pass	
Trichloroethene	M22-Ap0034693	CP	%	110		70-130	Pass	
Xylenes - Total*	M22-Ap0034693	CP	%	107		70-130	Pass	
Spike - % Recovery								
				Result 1				
Fluoride (Total)	M22-Ap0034696	CP	%	86		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Ap0029961	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ap0029961	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ap0029961	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-Ap0029961	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ap0029961	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ap0029961	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4,4'-DDD	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDE	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDT	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ap0023713	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-Ap0023713	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-Ap0023713	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-Ap0023713	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-Ap0023713	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-Ap0023713	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-Ap0023713	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-Ap0023713	NCP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-Ap0023713	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-Ap0023713	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-Ap0023713	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-Ap0023713	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-Ap0023713	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-Ap0023713	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-Ap0023713	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-Ap0023713	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
% Moisture	M22-Ap0034680	CP	%	29	25	14	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTTeDA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0030626	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0030626	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0030626	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0030626	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ap0034681	CP	pH Units	8.0	8.0	pass	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Cyanide (total)	M22-Ap0034685	CP	mg/kg	< 5	< 5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Fluoride (Total)	M22-Ap0034691	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M22-Ap0034692	CP	mg/kg	< 20	< 20	<1	30%	Pass
Naphthalene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M22-Ap0034692	CP	mg/kg	< 20	< 20	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Hexachlorobutadiene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1-Dichloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trichlorobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1-Dichloroethene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1-Trichloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1.2-Tetrachloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2-Trichloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2.2-Tetrachloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dibromoethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichlorobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloropropane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.3-Trichloropropane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trimethylbenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichlorobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichloropropane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3.5-Trimethylbenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-Ap0034692	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-Ap0034692	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-Ap0034692	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-Ap0034692	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-Ap0034692	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Trichlorofluoromethane	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-Ap0034692	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-Ap0034692	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-Ap0034692	CP	%	27	26	5.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Fluoride (Total)	M22-Ap0034693	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-Ap0034701	CP	mg/kg	< 1	< 1	<1	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ap0034701	CP	pH Units	11	11	pass	30%	Pass

Comments

This report has been revised (V2) following repeat analysis. Test (1.1.2 Trichloroethane) results for samples (Ap0034682 and Ap0034683) have now been replaced by the repeat results.

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
Richard Corner	Senior Analyst (NSW)
Linda Chouman	Senior Analyst (NSW)
Scott Beddoes	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)
Mary Makarios	Senior Analyst (NSW)
Harry Bacalis	Senior Analyst (NSW)
Caitlin Breeze	Senior Analyst (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](#).

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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 **880598-W**
Project name **20220416063429-Eurofin-20**
Project ID **JC0927**
Received Date **Apr 16, 2022**

Client Sample ID			SX_OB_20220 414_16_06_SR _Rinsate_EUF	SX_OB_20220 414_16_08_SB _Blank_EUF	SX_OB_20220 415_17_41_SR _Rinsate_EUF	SX_OB_20220 415_17_42_SB _Blank_EUF
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M22- Ap0034686	M22- Ap0034687	M22- Ap0034697	M22- Ap0034698
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 15, 2022	Apr 15, 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 (PFTeDA) ^{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	%	67	65	69	65
13C5-PFPeA (surr.)	1	%	89	76	75	77
13C5-PFHxA (surr.)	1	%	75	72	78	74
13C4-PFHpA (surr.)	1	%	70	66	69	67
13C8-PFOA (surr.)	1	%	66	60	64	62
13C5-PFNA (surr.)	1	%	63	58	65	63
13C6-PFDA (surr.)	1	%	53	42	53	46
13C2-PFUnDA (surr.)	1	%	56	43	45	42
13C2-PFDoDA (surr.)	1	%	32	22	22	21
13C2-PFTeDA (surr.)	1	%	15	14	18	11
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	%	59	43	47	43

Client Sample ID			SX_OB_20220 414_16_06_SR _Rinsate_EUF	SX_OB_20220 414_16_08_SB _Blank_EUF	SX_OB_20220 415_17_41_SR _Rinsate_EUF	SX_OB_20220 415_17_42_SB _Blank_EUF
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M22- Ap0034686	M22- Ap0034687	M22- Ap0034697	M22- Ap0034698
Date Sampled			Apr 14, 2022	Apr 14, 2022	Apr 15, 2022	Apr 15, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D3-N-MeFOSA (surr.)	1	%	13	12	11	12
D5-N-EtFOSA (surr.)	1	%	14	12	11	12
D7-N-MeFOSE (surr.)	1	%	29	17	24	22
D9-N-EtFOSE (surr.)	1	%	26	19	19	21
D5-N-EtFOSAA (surr.)	1	%	14	14	13	11
D3-N-MeFOSAA (surr.)	1	%	15	15	13	13
Perfluoroalkyl sulfonic acids (PFASs)						
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	%	87	83	81	80
18O2-PFHxS (surr.)	1	%	81	70	78	74
13C8-PFOS (surr.)	1	%	72	61	73	64
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	47	49	53	45
13C2-6:2 FTSA (surr.)	1	%	59	49	55	54
13C2-8:2 FTSA (surr.)	1	%	64	52	54	62
13C2-10:2 FTSA (surr.)	1	%	26	25	24	27
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

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Apr 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Apr 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Apr 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Apr 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Apr 16, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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_20220414_08_58_S_S_Primary_EU_F	Apr 14, 2022	8:58AM	Soil	M22-Ap0034680		X	X	X
2	SX_OB_20220414_09_04_S_S_Triplicate_EUF	Apr 14, 2022	9:04AM	Soil	M22-Ap0034681		X	X	X
3	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	Soil	M22-Ap0034682		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	Soil	M22-Ap0034683		X	X	X
5	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	Soil	M22-Ap0034684		X	X	X
6	SX_OB_20220414_15_51_S_S_Duplicate_EUF	Apr 14, 2022	3:51PM	Soil	M22-Ap0034685		X	X	X
7	SX_OB_20220414_16_06_S	Apr 14, 2022	4:06PM	Water	M22-Ap0034686			X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	R_Rinsate_EU F								
8	SX_OB_20220 414_16_08_S B_Blank_EUF	Apr 14, 2022	4:08PM	Water	M22- Ap0034687			X	
9	SX_OB_20220 414_20_09_S S_Primary_EU F	Apr 14, 2022	8:09PM	Soil	M22- Ap0034688		X	X	X
10	SX_OB_20220 415_00_06_S S_Primary_EU F	Apr 15, 2022	12:06AM	Soil	M22- Ap0034689		X	X	X
11	SX_OB_20220	Apr 15, 2022	4:06AM	Soil	M22-		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	415_04_06_S S_Primary_EU F				Ap0034690				
12	SX_OB_20220 415_08_46_S S_Primary_EU F	Apr 15, 2022	8:46AM	Soil	M22- Ap0034691		X	X	X
13	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	Soil	M22- Ap0034692		X	X	X
14	SX_OB_20220 415_12_04_S S_Primary_EU	Apr 15, 2022	12:04PM	Soil	M22- Ap0034693		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	F								
15	SX_IB_20220415_16_22_SS_Triplicate_EU_F	Apr 15, 2022	4:22PM	Soil	M22-Ap0034694		X	X	X
16	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	Soil	M22-Ap0034695		X	X	X
17	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	Soil	M22-Ap0034696		X	X	X
18	SX_OB_20220	Apr 15, 2022	5:41PM	Water	M22-			X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	415_17_41_S R_Rinsate_EU F				Ap0034697				
19	SX_OB_20220 415_17_42_S B_Blank_EUF	Apr 15, 2022	5:42PM	Water	M22- Ap0034698			X	
20	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	Soil	M22- Ap0034699		X	X	X
21	SX_OB_20220 416_00_06_S S_Primary_EU F	Apr 16, 2022	12:06AM	Soil	M22- Ap0034700		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
22	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	Soil	M22-Ap0034701		X	X	X
23	SX_OB_20220414_08_58_S_Primary_EUF	Apr 14, 2022	8:58AM	AUS Leachate - pH 5.0	M22-Ap0034702	X		X	
24	SX_OB_20220414_09_04_S_Triplicate_EUF	Apr 14, 2022	9:04AM	AUS Leachate - pH 5.0	M22-Ap0034703	X		X	
25	SX_OB_20220414_12_01_S_Primary_EUF	Apr 14, 2022	12:01PM	AUS Leachate - pH 5.0	M22-Ap0034704	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									
	F								
26	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - pH 5.0	M22-Ap0034705	X		X	
27	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - pH 5.0	M22-Ap0034706	X		X	
28	SX_OB_20220414_15_51_S_S_Duplicate_EUF	Apr 14, 2022	3:51PM	AUS Leachate - pH 5.0	M22-Ap0034707	X		X	
29	SX_OB_20220	Apr 14, 2022	8:09PM	AUS Leachate	M22-	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
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Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
29	SX_OB_20220414_20_09_S_S_Primary_EU_F	Apr 14, 2022	8:09PM	AUS Leachate - pH 5.0	M22-Ap0034708				
30	SX_OB_20220415_00_06_S_S_Primary_EU_F	Apr 15, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034709	X		X	
31	SX_OB_20220415_04_06_S_S_Primary_EU_F	Apr 15, 2022	4:06AM	AUS Leachate - pH 5.0	M22-Ap0034710	X		X	
32	SX_OB_20220415_08_46_S	Apr 15, 2022	8:46AM	AUS Leachate - pH 5.0	M22-Ap0034711	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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								
33	SX_OB_20220 415_08_48_S S_Duplicate_E UF	Apr 15, 2022	8:48AM	AUS Leachate - pH 5.0	M22- Ap0034712	X		X	
34	SX_OB_20220 415_12_04_S S_Primary_EU F	Apr 15, 2022	12:04PM	AUS Leachate - pH 5.0	M22- Ap0034713	X		X	
35	SX_IB_202204 15_16_22_SS TriPLICATE_EU F	Apr 15, 2022	4:22PM	AUS Leachate - pH 5.0	M22- Ap0034714	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									
36	SX_OB_20220415_16_28_S_S_Primary_EU_F	Apr 15, 2022	4:28PM	AUS Leachate - pH 5.0	M22-Ap0034715	X		X	
37	SX_OB_20220415_16_49_S_S_Primary_EU_F	Apr 15, 2022	4:49PM	AUS Leachate - pH 5.0	M22-Ap0034716	X		X	
38	SX_OB_20220415_20_10_S_S_Primary_EU_F	Apr 15, 2022	8:10PM	AUS Leachate - pH 5.0	M22-Ap0034717	X		X	
39	SX_OB_20220416_00_06_S	Apr 16, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ap0034718	X		X	

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Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	880598	Due:	Apr 22, 2022
Project Name:	20220416063429-Eurofin-20	Phone:	08 8338 1009	Priority:	3 Day
Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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								
40	SX_IB_202204 16_04_24_SS _Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - pH 5.0	M22- Ap0034719	X		X	
41	SX_OB_20220 414_08_58_S S_Primary_EU F	Apr 14, 2022	8:58AM	AUS Leachate - Reagent Water	M22- Ap0034720	X		X	
42	SX_OB_20220 414_09_04_S S_Triplicate_E UF	Apr 14, 2022	9:04AM	AUS Leachate - Reagent Water	M22- Ap0034721	X		X	
43	SX_OB_20220	Apr 14, 2022	12:01PM	AUS Leachate	M22-	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
43	SX_OB_20220414_12_01_S_S_Primary_EU_F	Apr 14, 2022	12:01PM	AUS Leachate - Reagent Water	M22-Ap0034722				
44	SX_OB_20220414_12_03_S_S_Primary_EU_F	Apr 14, 2022	12:03PM	AUS Leachate - Reagent Water	M22-Ap0034723	X		X	
45	SX_OB_20220414_15_50_S_S_Primary_EU_F	Apr 14, 2022	3:50PM	AUS Leachate - Reagent Water	M22-Ap0034724	X		X	
46	SX_OB_20220414_15_51_S	Apr 14, 2022	3:51PM	AUS Leachate - Reagent	M22-Ap0034725	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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_Duplicate_EUF			Water					
47	SX_OB_20220414_20_09_S_S_Primary_EUF	Apr 14, 2022	8:09PM	AUS Leachate - Reagent Water	M22-Ap0034726	X		X	
48	SX_OB_20220415_00_06_S_S_Primary_EUF	Apr 15, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034727	X		X	
49	SX_OB_20220415_04_06_S_S_Primary_EUF	Apr 15, 2022	4:06AM	AUS Leachate - Reagent Water	M22-Ap0034728	X		X	

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Project ID:	JC0927	Fax:		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)	IWRG 621 WQTP 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									
50	SX_OB_20220415_08_46_S_S_Primary_EU_F	Apr 15, 2022	8:46AM	AUS Leachate - Reagent Water	M22-Ap0034729	X		X	
51	SX_OB_20220415_08_48_S_S_Duplicate_EUF	Apr 15, 2022	8:48AM	AUS Leachate - Reagent Water	M22-Ap0034730	X		X	
52	SX_OB_20220415_12_04_S_S_Primary_EU_F	Apr 15, 2022	12:04PM	AUS Leachate - Reagent Water	M22-Ap0034731	X		X	
53	SX_IB_20220415_16_22_SS	Apr 15, 2022	4:22PM	AUS Leachate - Reagent	M22-Ap0034732	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
	_TriPLICATE_EU F			Water					
54	SX_OB_20220 415_16_28_S S_Primary_EU F	Apr 15, 2022	4:28PM	AUS Leachate - Reagent Water	M22- Ap0034733	X		X	
55	SX_OB_20220 415_16_49_S S_Primary_EU F	Apr 15, 2022	4:49PM	AUS Leachate - Reagent Water	M22- Ap0034734	X		X	
56	SX_OB_20220 415_20_10_S S_Primary_EU F	Apr 15, 2022	8:10PM	AUS Leachate - Reagent Water	M22- Ap0034735	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP 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									
57	SX_OB_20220416_00_06_S_S_Primary_EUF	Apr 16, 2022	12:06AM	AUS Leachate - Reagent Water	M22-Ap0034736	X		X	
58	SX_IB_20220416_04_24_SS_Primary_EUF	Apr 16, 2022	4:24AM	AUS Leachate - Reagent Water	M22-Ap0034737	X		X	
Test Counts						36	18	58	18

Internal Quality Control Review and Glossary

General

- 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.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- 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 (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 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.

QC Data General Comments

- 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.
- 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.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
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)	%	80		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	109		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	93		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	84		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	87		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	87		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	90		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	107		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	141		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	108			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	106			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	100			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	102			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	88			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	90			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	100			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)								
Perfluorobutanesulfonic acid (PFBS)	%	92			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	64			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	82			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	79			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	82			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	80			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	86			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	58			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	94			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	107			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	101			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
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	M22-Ap0033180	NCP	%	122		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ap0033180	NCP	%	119		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ap0033180	NCP	%	101		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ap0033180	NCP	%	107		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ap0033180	NCP	%	95		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ap0033180	NCP	%	96		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ap0033180	NCP	%	105		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0033180	NCP	%	105		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ap0033180	NCP	%	117		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0033180	NCP	%	100		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0033180	NCP	%	116		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	M22-Ap0033180	NCP	%	121		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0033180	NCP	%	150		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0033180	NCP	%	135		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0033180	NCP	%	125		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0033180	NCP	%	114		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0033180	NCP	%	83			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0033180	NCP	%	110			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0033180	NCP	%	104			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ap0033180	NCP	%	71			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0033180	NCP	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0033180	NCP	%	85			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0033180	NCP	%	90			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0033180	NCP	%	91			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0033180	NCP	%	88			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0033180	NCP	%	64			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0033180	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0033180	NCP	%	137			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0033180	NCP	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0033180	NCP	%	139			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTEDA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0034697	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0034697	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

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

Qualifier Codes/Comments

Code	Description
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 (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](#).

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From: Labreports.TST <labreports.tst@agonenviro.com.au>
Sent: Sunday, 17 April 2022 8:35 AM
To: Emma Strong <emma.strong@eprisk.com.au>; Josh Alexander <josh.alexander@ALSGlobal.com>; Bronwyn Sheen <bronwyn.sheen@alsglobal.com>
Cc: ALS WGTP <ALS.WGTP@ALSGlobal.com>; Labreports.TST <labreports.tst@agonenviro.com.au>; Amrit Kaur (Agile Analytics <Amrit.Kaur@agile-analytics.com.au>
Subject: [EXTERNAL] - RE: WGTP TST Sample Delivery

Hi Josh,

Please see updated COC with updated reference number

Cheers

William O'Haire

Environmental Consultant

HAZMAT Consultant

Agon Environmental

+61 413123084

william.ohaire@agonenviro.com.au

From: Emma Strong <emma.strong@eprisk.com.au>
Sent: Saturday, 16 April 2022 7:51 AM
To: Josh Alexander <josh.alexander@ALSGlobal.com>; Bronwyn Sheen <bronwyn.sheen@alsglobal.com>
Cc: ALS WGTP <als.wgtp@alsglobal.com>; Labreports.TST <labreports.tst@agonenviro.com.au>; Amrit Kaur (Agile Analytics <Amrit.Kaur@agile-analytics.com.au>
Subject: WGTP TST Sample Delivery

Hi Josh,

Please find 1 x COC for samples collected at pivot that are arriving today. There is no current reference number as our app did not generate one when Tina tried last night.

I will update you with this once we have it.

Kind regards,

Emma Strong

Environmental Scientist

M 0402 510 610 | E emma.strong@eprisk.com.au

EP Risk Management Pty Ltd | ABN 81 147 147 591
Unit 22, 1 Ricketts Road | Mount Waverley VIC 3149
T +61 3 8540 7302 | W www.eprisk.com.au



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CERTIFICATE OF ANALYSIS

Work Order : **EM2206959**
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 : 20220417083056-ALS-8
Sampler : DL - Agon, Hannah - EP Risk, TB - Agon
Site : 20220417083056-ALS-8
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 40
No. of samples analysed : 40

Page : 1 of 53
Laboratory : Environmental Division Melbourne
Contact : Josh Alexander
Address : 4 Westall Rd Springvale VIC Australia 3171

Telephone : +61-3-8549 9600
Date Samples Received : 16-Apr-2022 09:00
Date Analysis Commenced : 16-Apr-2022
Issue Date : 22-Apr-2022 19:27



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic 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.
- EP231X: Poor matrix spike recovery for sample EM2206959-027 due to sample matrix interference.
- EP231X: Poor matrix spike recovery for sample EM2206720-010 due to sample matrix interference.
- EG005-T : EM2206892 #8 Poor duplicate precision for Lead due to sample matrix. Confirmed by re-digestion and re-analysis.
- EG005-T : EM2206892 #22 Poor duplicate precision for Zinc due to sample matrix. Confirmed by re-digestion and re-analysis.
- EG005-T : EM2206959 #9 Poor spike recovery for Arsenic due to sample matrix. Confirmed by re-digestion and re-analysis.
- 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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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 (PFTTrDA)	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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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	%	93.1	102	91.8	95.6	86.1
13C8-PFOA	----	0.02	%	98.5	101	101	99.5	102



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	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	%	96.2	88.0	90.0	97.1	91.8
13C8-PFOA	----	0.02	%	98.8	98.8	99.8	101	99.1



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	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	%	98.3	88.5	94.8	91.6	88.5
13C8-PFOA	----	0.02	%	102	98.0	97.3	98.0	102



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	----	----
		Sampling date / time		15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	----	----
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	-----	-----
				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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	----	----
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	----	----
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	-----	-----
				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	%	90.5	94.1	93.7	----	----
13C8-PFOA	----	0.02	%	99.1	97.6	100	----	----



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-019	EM2206959-020	EM2206959-021	EM2206959-022	EM2206959-023
				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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-019	EM2206959-020	EM2206959-021	EM2206959-022	EM2206959-023
				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	%	117	110	123	100	104
13C8-PFOA	----	0.02	%	101	99.7	99.7	101	102



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 00:14	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-024	EM2206959-025	EM2206959-026	EM2206959-027	EM2206959-028
				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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 00:14	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-024	EM2206959-025	EM2206959-026	EM2206959-027	EM2206959-028
				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	%	112	120	108	122	128
13C8-PFOA	----	0.02	%	101	100	100	104	102



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-029	EM2206959-030	EM2206959-031	EM2206959-032	EM2206959-033
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-029	EM2206959-030	EM2206959-031	EM2206959-032	EM2206959-033
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	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	%	112	115	131	120	129
13C8-PFOA	----	0.02	%	98.3	100	97.7	101	103



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	----	----
		Sampling date / time		15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	----	----
Compound	CAS Number	LOR	Unit	EM2206959-034	EM2206959-035	EM2206959-036	-----	-----
				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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	----	----
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	----	----
Compound	CAS Number	LOR	Unit	EM2206959-034	EM2206959-035	EM2206959-036	-----	-----
				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	%	136	127	102	----	----
13C8-PFOA	----	0.02	%	97.2	103	99.4	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	7.5	7.6	7.6	7.7	7.7
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	29.3	32.8	33.9	31.8	27.7
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	32	35	27	31	32
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	90	100	100	110	113
Copper	7440-50-8	5	mg/kg	54	60	52	66	55
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	165	164	153	192	172
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	92	115	99	118	96
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	140	130	110	170	170
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	8.7	8.6	8.5	8.8	9.3
After HCl pH	----	0.1	pH Unit	1.1	1.0	1.0	1.0	1.0
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ 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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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	72-54-8/72-55-9/5 0-2	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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS	SX_OB_20220414_09_03_SS_Primary_ALS	SX_OB_20220414_11_54_SS_Primary_ALS	SX_OB_20220414_15_47_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
Compound	CAS Number	LOR	Unit	EM2206959-001	EM2206959-002	EM2206959-003	EM2206959-004	EM2206959-005
				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	%	113	107	97.0	104	99.3
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	77.7	88.6	78.7	88.3	89.1
Toluene-D8	2037-26-5	0.1	%	78.4	91.0	79.1	89.9	87.1
4-Bromofluorobenzene	460-00-4	0.1	%	84.2	97.6	86.7	95.6	96.9
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	104	106	94.9	112	89.6
2-Chlorophenol-D4	93951-73-6	0.025	%	96.1	101	79.9	104	83.0
2,4,6-Tribromophenol	118-79-6	0.025	%	87.6	78.0	72.6	83.9	77.9
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	87.9	94.0	86.4	98.4	80.7
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	81.1	78.8	75.4	82.4	65.4
2-Fluorobiphenyl	321-60-8	0.025	%	102	93.4	85.6	96.6	92.3
Anthracene-d10	1719-06-8	0.025	%	99.8	91.6	83.5	93.9	89.6
4-Terphenyl-d14	1718-51-0	0.025	%	100	135	70.1	96.4	101
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	93.7	103	88.0	91.5	97.8
13C8-PFOA	----	0.0002	%	108	107	104	108	108



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	7.7	7.6	7.8	7.6	10.3
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	32.2	32.6	28.1	31.9	32.3
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	34	34	41	30	23
Cadmium	7440-43-9	1	mg/kg	<1	<1	2	<1	<1
Chromium	7440-47-3	5	mg/kg	110	119	124	111	131
Copper	7440-50-8	5	mg/kg	58	71	66	54	55
Lead	7439-92-1	5	mg/kg	<5	<5	10	6	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	174	182	180	160	161
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	106	126	80	108	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	140	150	140	120	180
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	8.7	8.0	9.3	8.9	10.7
After HCl pH	----	0.1	pH Unit	1.0	1.0	1.0	1.1	1.1
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.4
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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				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	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ 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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				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	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				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_20220414_15_52_SS_Triplicate_ALS	SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220415_00_14_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS	SX_IB_20220415_08_41_SS_Primary_ALS
Sampling date / time				14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	CAS Number	LOR	Unit	EM2206959-006	EM2206959-007	EM2206959-008	EM2206959-009	EM2206959-010
				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	<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	%	102	102	102	92.4	102
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	87.0	81.9	83.6	85.1	74.8
Toluene-D8	2037-26-5	0.1	%	86.8	86.2	86.7	85.2	73.1
4-Bromofluorobenzene	460-00-4	0.1	%	97.8	91.0	92.0	90.8	84.2
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	111	88.8	108	95.5	101
2-Chlorophenol-D4	93951-73-6	0.025	%	107	81.9	102	92.3	95.5
2,4,6-Tribromophenol	118-79-6	0.025	%	82.3	93.6	101	95.6	72.2
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	110	78.8	97.4	87.1	97.2
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	85.1	66.6	71.5	67.0	76.1
2-Fluorobiphenyl	321-60-8	0.025	%	96.8	93.4	97.1	89.2	93.8
Anthracene-d10	1719-06-8	0.025	%	94.0	91.1	95.8	94.6	92.1
4-Terphenyl-d14	1718-51-0	0.025	%	105	105	81.2	60.6	106
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	93.6	96.9	96.4	100	107
13C8-PFOA	----	0.0002	%	107	106	112	105	109



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	11.2	11.3	11.3
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	26.4	27.6	38.5	30.7	33.6
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	43	38	29	19	17
Cadmium	7440-43-9	1	mg/kg	1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	93	104	99	82	103
Copper	7440-50-8	5	mg/kg	53	52	44	35	44
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	161	158	124	105	127
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	84	83	78	66	82
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	140	170	170	200	190
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.2	9.1	11.3	11.3	11.3
After HCl pH	----	0.1	pH Unit	1.1	1.0	1.0	1.0	1.0
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.0	5.0	8.9	8.5	9.1
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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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	0.8	4.0	0.9
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	0.8	4.0	0.9
^ 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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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	72-54-8/72-55-9/5 0-2	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	180	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	400	140
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	580	140
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	470	160
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	310	110
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	780	270
>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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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_20220415_08_50_SS_Triplicate_ALS	SX_OB_20220415_08_50_SS_Primary_ALS	SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
Compound	CAS Number	LOR	Unit	EM2206959-011	EM2206959-012	EM2206959-013	EM2206959-014	EM2206959-015
				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	%	94.5	117	113	106	111
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	85.5	71.9	86.0	78.5	82.7
Toluene-D8	2037-26-5	0.1	%	83.6	68.8	86.2	82.2	82.9
4-Bromofluorobenzene	460-00-4	0.1	%	91.8	84.4	95.4	85.7	87.7
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	82.1	97.6	88.3	93.0	99.1
2-Chlorophenol-D4	93951-73-6	0.025	%	76.0	93.7	77.3	74.4	82.6
2,4,6-Tribromophenol	118-79-6	0.025	%	73.3	91.0	69.4	67.8	65.4
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	76.2	110	106	102	107
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	62.8	86.6	83.9	81.9	81.7
2-Fluorobiphenyl	321-60-8	0.025	%	85.7	103	98.4	93.7	95.9
Anthracene-d10	1719-06-8	0.025	%	83.5	98.6	96.5	95.1	80.5
4-Terphenyl-d14	1718-51-0	0.025	%	87.1	101	98.3	95.6	93.8
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	98.4	101	98.0	104	104
13C8-PFOA	----	0.0002	%	112	104	107	113	110



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	11.0	10.8	7.7	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	36.2	36.2	32.4	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	18	19	45	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg	100	102	124	----	----
Copper	7440-50-8	5	mg/kg	44	46	62	----	----
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	134	138	134	----	----
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	77	81	89	----	----
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	170	170	140	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	11.4	11.2	9.0	----	----
After HCl pH	----	0.1	pH Unit	1.0	1.0	1.0	----	----
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit	6.2	7.6	5.1	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	9.4	9.4
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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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	1.8	<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	1.8	<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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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	72-54-8/72-55-9/5 0-2	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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS	SX_OB_20220416_04_08_SS_Primary_ALS	SX_OB_20220414_09_01_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS
Sampling date / time				15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
Compound	CAS Number	LOR	Unit	EM2206959-016	EM2206959-017	EM2206959-018	EM2206959-019	EM2206959-020
				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	%	112	118	110	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	60.2	80.7	81.4	----	----
Toluene-D8	2037-26-5	0.1	%	60.8	82.1	83.3	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	63.0	83.5	89.1	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	99.8	108	102	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	88.6	90.0	91.8	----	----
2,4,6-Tribromophenol	118-79-6	0.025	%	91.0	73.3	92.1	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	108	121	113	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	86.4	88.2	85.0	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	96.4	103	97.7	----	----
Anthracene-d10	1719-06-8	0.025	%	109	93.0	99.8	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	86.1	101	94.8	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	95.0	98.6	103	----	----
13C8-PFOA	----	0.0002	%	108	114	109	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220414_09 _03_SS_Primary_ALS	SX_OB_20220414_11 _54_SS_Primary_ALS	SX_OB_20220414_15 _47_SS_Primary_ALS	SX_OB_20220414_15 _52_SS_Triplicate_AL S	SX_OB_20220414_20 _14_SS_Primary_ALS
Sampling date / time				14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47	14-Apr-2022 00:14	14-Apr-2022 20:14
Compound	CAS Number	LOR	Unit	EM2206959-021	EM2206959-022	EM2206959-023	EM2206959-024	EM2206959-025
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.4	9.4	9.6	9.5	9.3



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220415_12_00_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Primary_ALS	SX_IB_20220415_16_21_SS_Duplicate_ALS	SX_IB_20220415_20_06_SS_Primary_ALS	SX_IB_20220416_00_20_SS_Primary_ALS
Sampling date / time				15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21	15-Apr-2022 20:06	16-Apr-2022 00:20
Compound	CAS Number	LOR	Unit	EM2206959-031	EM2206959-032	EM2206959-033	EM2206959-034	EM2206959-035
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	11.8	12.0	11.9	11.7	11.9



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_OB_20220416_04 _08_SS_Primary_ALS	----	----	----	----
			Sampling date / time	16-Apr-2022 04:08	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2206959-036	-----	-----	-----	-----
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.8	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220414_09_18_SR_Rinsate_ALS	SX_OB_20220414_09_19_SB_Blank_ALS	SX_IB_20220415_17_43_SB_Blank_ALS	SX_IB_20220415_17_44_SR_Rinsate_ALS	----
Sampling date / time				14-Apr-2022 09:18	14-Apr-2022 09:19	15-Apr-2022 17:43	15-Apr-2022 14:44	----	
Compound	CAS Number	LOR	Unit	EM2206959-037	EM2206959-038	EM2206959-039	EM2206959-040	-----	
				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	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220414_09_18_SR_Rinsate_ALS	SX_OB_20220414_09_19_SB_Blank_ALS	SX_IB_20220415_17_43_SB_Blank_ALS	SX_IB_20220415_17_44_SR_Rinsate_ALS	----
Sampling date / time				14-Apr-2022 09:18	14-Apr-2022 09:19	15-Apr-2022 17:43	15-Apr-2022 14:44	----	
Compound	CAS Number	LOR	Unit	EM2206959-037	EM2206959-038	EM2206959-039	EM2206959-040	-----	
				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	0.02	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	%	117	120	113	112	----	
13C8-PFOA	----	0.02	%	97.6	101	102	100	----	



Surrogate Control Limits

Sub-Matrix: ASLP LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: DI WATER LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	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

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Automated Guideline Comparison Report

EPA Victoria Publication IWRG 621 (2009) - Table 2: Soil Hazard Categorisation

Work Order	: EM2206959	Page	: 1 of 52
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	: Josh.Alexander@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 16-Apr-2022 09:00
Order number	: ----	Date Analysed	: 16-Apr-2022
C-O-C number	: 20220417083056-ALS-8	Date Issued	: 22-Apr-2022 19:23
No. of samples received	: 40		
No. of samples analysed	: 40	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_20220414_09_01_S SS_Primary_ALS	EM2206959-001	Arsenic	EG005T	5	< 20 mg/kg	32 mg/kg
SX_OB_20220414_09_01_S SS_Primary_ALS	EM2206959-001	Nickel	EG005T	5	< 60 mg/kg	165 mg/kg
SX_OB_20220414_09_02_S SS_Duplicate_ALS	EM2206959-002	Arsenic	EG005T	5	< 20 mg/kg	35 mg/kg
SX_OB_20220414_09_02_S SS_Duplicate_ALS	EM2206959-002	Nickel	EG005T	5	< 60 mg/kg	164 mg/kg
SX_OB_20220414_09_03_S SS_Primary_ALS	EM2206959-003	Arsenic	EG005T	5	< 20 mg/kg	27 mg/kg
SX_OB_20220414_09_03_S SS_Primary_ALS	EM2206959-003	Nickel	EG005T	5	< 60 mg/kg	153 mg/kg
SX_OB_20220414_11_54_S SS_Primary_ALS	EM2206959-004	Arsenic	EG005T	5	< 20 mg/kg	31 mg/kg
SX_OB_20220414_11_54_S SS_Primary_ALS	EM2206959-004	Nickel	EG005T	5	< 60 mg/kg	192 mg/kg
SX_OB_20220414_15_47_S SS_Primary_ALS	EM2206959-005	Arsenic	EG005T	5	< 20 mg/kg	32 mg/kg
SX_OB_20220414_15_47_S SS_Primary_ALS	EM2206959-005	Nickel	EG005T	5	< 60 mg/kg	172 mg/kg
SX_OB_20220414_15_52_S SS_Triplicate_ALS	EM2206959-006	Arsenic	EG005T	5	< 20 mg/kg	34 mg/kg
SX_OB_20220414_15_52_S SS_Triplicate_ALS	EM2206959-006	Nickel	EG005T	5	< 60 mg/kg	174 mg/kg
SX_OB_20220414_20_14_S SS_Primary_ALS	EM2206959-007	Arsenic	EG005T	5	< 20 mg/kg	34 mg/kg
SX_OB_20220414_20_14_S SS_Primary_ALS	EM2206959-007	Nickel	EG005T	5	< 60 mg/kg	182 mg/kg
SX_OB_20220415_00_14_S SS_Primary_ALS	EM2206959-008	Arsenic	EG005T	5	< 20 mg/kg	41 mg/kg
SX_OB_20220415_00_14_S SS_Primary_ALS	EM2206959-008	Nickel	EG005T	5	< 60 mg/kg	180 mg/kg
SX_OB_20220415_04_17_S SS_Primary_ALS	EM2206959-009	Arsenic	EG005T	5	< 20 mg/kg	30 mg/kg
SX_OB_20220415_04_17_S SS_Primary_ALS	EM2206959-009	Nickel	EG005T	5	< 60 mg/kg	160 mg/kg
SX_IB_20220415_08_41_S S_Primary_ALS	EM2206959-010	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	10.3 pH Unit



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_IB_20220415_08_41_S S_Primary_ALS	EM2206959-010	Arsenic	EG005T	5	< 20 mg/kg	23 mg/kg
SX_IB_20220415_08_41_S S_Primary_ALS	EM2206959-010	Nickel	EG005T	5	< 60 mg/kg	161 mg/kg
SX_OB_20220415_08_50_ SS_Triplicate_ALS	EM2206959-011	Arsenic	EG005T	5	< 20 mg/kg	43 mg/kg
SX_OB_20220415_08_50_ SS_Triplicate_ALS	EM2206959-011	Nickel	EG005T	5	< 60 mg/kg	161 mg/kg
SX_OB_20220415_08_50_ SS_Primary_ALS	EM2206959-012	Arsenic	EG005T	5	< 20 mg/kg	38 mg/kg
SX_OB_20220415_08_50_ SS_Primary_ALS	EM2206959-012	Nickel	EG005T	5	< 60 mg/kg	158 mg/kg
SX_IB_20220415_12_00_S S_Primary_ALS	EM2206959-013	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	11.2 pH Unit
SX_IB_20220415_12_00_S S_Primary_ALS	EM2206959-013	Arsenic	EG005T	5	< 20 mg/kg	29 mg/kg
SX_IB_20220415_12_00_S S_Primary_ALS	EM2206959-013	Nickel	EG005T	5	< 60 mg/kg	124 mg/kg
SX_IB_20220415_16_21_S S_Primary_ALS	EM2206959-014	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	11.3 pH Unit
SX_IB_20220415_16_21_S S_Primary_ALS	EM2206959-014	Nickel	EG005T	5	< 60 mg/kg	105 mg/kg
SX_IB_20220415_16_21_S S_Duplicate_ALS	EM2206959-015	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	11.3 pH Unit
SX_IB_20220415_16_21_S S_Duplicate_ALS	EM2206959-015	Nickel	EG005T	5	< 60 mg/kg	127 mg/kg
SX_IB_20220415_20_06_S S_Primary_ALS	EM2206959-016	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	11.0 pH Unit
SX_IB_20220415_20_06_S S_Primary_ALS	EM2206959-016	Nickel	EG005T	5	< 60 mg/kg	134 mg/kg
SX_IB_20220416_00_20_S S_Primary_ALS	EM2206959-017	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	10.8 pH Unit
SX_IB_20220416_00_20_S S_Primary_ALS	EM2206959-017	Nickel	EG005T	5	< 60 mg/kg	138 mg/kg
SX_OB_20220416_04_08_ SS_Primary_ALS	EM2206959-018	Arsenic	EG005T	5	< 20 mg/kg	45 mg/kg
SX_OB_20220416_04_08_ SS_Primary_ALS	EM2206959-018	Nickel	EG005T	5	< 60 mg/kg	134 mg/kg



EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Category C

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_IB_20220415_08_41_S S_Primary_ALS	EM2206959-010	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	10.3 pH Unit
SX_IB_20220415_12_00_S S_Primary_ALS	EM2206959-013	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	11.2 pH Unit
SX_IB_20220415_16_21_S S_Primary_ALS	EM2206959-014	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	11.3 pH Unit
SX_IB_20220415_16_21_S S_Duplicate_ALS	EM2206959-015	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	11.3 pH Unit
SX_IB_20220415_20_06_S S_Primary_ALS	EM2206959-016	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	11.0 pH Unit
SX_IB_20220416_00_20_S S_Primary_ALS	EM2206959-017	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	10.8 pH Unit



Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	414_09_01_S	414_09_02_S	414_09_03_S	414_11_54_S	414_15_47_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
						EM2206959-001 MU	EM2206959-002 MU	EM2206959-003 MU	EM2206959-004 MU	EM2206959-005 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS	SX_OB_20220 414_09_03_S S_Primary_AL S	SX_OB_20220 414_11_54_S S_Primary_AL S	SX_OB_20220 414_15_47_S S_Primary_AL S
				Guideline	Guideline	14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
				Lower Limit	Upper Limit	EM2206959-001 MU	EM2206959-002 MU	EM2206959-003 MU	EM2206959-004 MU	EM2206959-005 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.5 ± 0.1	7.6 ± 0.1	7.6 ± 0.1	7.7 ± 0.1	7.7 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	32 ± 4	35 ± 5	27 ± 4	31 ± 4	32 ± 4
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	54 ± 7	60 ± 7	52 ± 6	66 ± 8	55 ± 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	165 ± 16	164 ± 16	153 ± 15	192 ± 19	172 ± 17
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	92 ± 10	115 ± 12	99 ± 11	118 ± 13	96 ± 11
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	140 ± 40	130 ± 30	110 ± 30	170 ± 40	170 ± 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 ..	<0.5 ..
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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	414_09_01_S	414_09_02_S	414_09_03_S	414_11_54_S	414_15_47_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
						EM2206959-001 MU	EM2206959-002 MU	EM2206959-003 MU	EM2206959-004 MU	EM2206959-005 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS	SX_OB_20220 414_09_03_S S_Primary_AL S	SX_OB_20220 414_11_54_S S_Primary_AL S	SX_OB_20220 414_15_47_S S_Primary_AL S
				Guideline	Guideline	14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
				Lower Limit	Upper Limit	EM2206959-001 MU	EM2206959-002 MU	EM2206959-003 MU	EM2206959-004 MU	EM2206959-005 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.5 ± 0.1	7.6 ± 0.1	7.6 ± 0.1	7.7 ± 0.1	7.7 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	32 ± 4	35 ± 5	27 ± 4	31 ± 4	32 ± 4
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	54 ± 7	60 ± 7	52 ± 6	66 ± 8	55 ± 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	165 ± 16	164 ± 16	153 ± 15	192 ± 19	172 ± 17
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	92 ± 10	115 ± 12	99 ± 11	118 ± 13	96 ± 11
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	140 ± 40	130 ± 30	110 ± 30	170 ± 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 ..	<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 ..	<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 ..	<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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	414_09_01_S	414_09_02_S	414_09_03_S	414_11_54_S	414_15_47_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 09:01	14-Apr-2022 09:02	14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47
						EM2206959-001 MU	EM2206959-002 MU	EM2206959-003 MU	EM2206959-004 MU	EM2206959-005 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_20220 414_15_52_S S_Triplicate_ ALS	SX_OB_20220 414_20_14_S S_Primary_AL S	SX_OB_20220 415_00_14_S S_Primary_AL S	SX_OB_20220 415_04_17_S S_Primary_AL S	SX_IB_20220 415_08_41_S S_Primary_AL S
Sampling date/time				Guideline	Guideline	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
Compound	Method	LOR	Unit	Lower Limit	Upper Limit	EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.7 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.6 ± 0.1	10.3 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	34 ± 5	34 ± 5	41 ± 5	30 ± 4	23 ± 3
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	2 ± 0.2	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	20000	58 ± 7	71 ± 9	66 ± 8	54 ± 7	55 ± 7
Lead	EG005T	5	mg/kg	----	6000	<5 ..	<5 ..	10 ± 1	6 ± 1.0	<5 ..
Molybdenum	EG005T	5	mg/kg	----	4000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	12000	174 ± 17	182 ± 18	180 ± 18	160 ± 16	161 ± 16
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	106 ± 12	126 ± 14	80 ± 9	108 ± 12	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	140 ± 30	150 ± 40	140 ± 30	120 ± 30	180 ± 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 ..	<0.5 ..
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 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	414_15_52_S	414_20_14_S	415_00_14_S	415_04_17_S	415_08_41_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
						EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	414_15_52_S	414_20_14_S	415_00_14_S	415_04_17_S	415_08_41_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
						EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.7 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.6 ± 0.1	10.3 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	34 ± 5	34 ± 5	41 ± 5	30 ± 4	23 ± 3
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	2 ± 0.2	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	58 ± 7	71 ± 9	66 ± 8	54 ± 7	55 ± 7
Lead	EG005T	5	mg/kg	----	1500	<5 ..	<5 ..	10 ± 1	6 ± 1.0	<5 ..
Molybdenum	EG005T	5	mg/kg	----	1000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	3000	174 ± 17	182 ± 18	180 ± 18	160 ± 16	161 ± 16
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	106 ± 12	126 ± 14	80 ± 9	108 ± 12	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	140 ± 30	150 ± 40	140 ± 30	120 ± 30	180 ± 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 ..	<0.5 ..
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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	414_15_52_S	414_20_14_S	415_00_14_S	415_04_17_S	415_08_41_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
						EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	414_15_52_S	414_20_14_S	415_00_14_S	415_04_17_S	415_08_41_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
						EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.7 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.6 ± 0.1	10.3 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	34 ± 5	34 ± 5	41 ± 5	30 ± 4	23 ± 3
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	2 ± 0.2	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	58 ± 7	71 ± 9	66 ± 8	54 ± 7	55 ± 7
Lead	EG005T	5	mg/kg	----	300	<5 ..	<5 ..	10 ± 1	6 ± 1.0	<5 ..
Molybdenum	EG005T	5	mg/kg	----	40	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	60	174 ± 17	182 ± 18	180 ± 18	160 ± 16	161 ± 16
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	106 ± 12	126 ± 14	80 ± 9	108 ± 12	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	140 ± 30	150 ± 40	140 ± 30	120 ± 30	180 ± 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 ..	<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 ..	<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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	414_15_52_S	414_20_14_S	415_00_14_S	415_04_17_S	415_08_41_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	14-Apr-2022 15:52	14-Apr-2022 20:14	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41
						EM2206959-006 MU	EM2206959-007 MU	EM2206959-008 MU	EM2206959-009 MU	EM2206959-010 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 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	11.2 ± 0.2	11.3 ± 0.2	11.3 ± 0.2
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	43 ± 6	38 ± 5	29 ± 4	19 ± 3	17 ± 3
Cadmium	EG005T	1	mg/kg	----	400	1 ± 0.2	<1 --	<1 --	<1 --	<1 --
Copper	EG005T	5	mg/kg	----	20000	53 ± 6	52 ± 6	44 ± 5	35 ± 4	44 ± 5
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	161 ± 16	158 ± 16	124 ± 12	105 ± 10	127 ± 12
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	84 ± 9	83 ± 9	78 ± 9	66 ± 8	82 ± 9
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	140 ± 40	170 ± 40	170 ± 40	200 ± 40	190 ± 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 --	0.8 ± 0.1	4.0 ± 0.6	0.9 ± 0.1
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 --
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
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 ..	580 ± 100	140 ± 30



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	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 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	11.2 ± 0.2	11.3 ± 0.2	11.3 ± 0.2
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	43 ± 6	38 ± 5	29 ± 4	19 ± 3	17 ± 3
Cadmium	EG005T	1	mg/kg	----	100	1 ± 0.2	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	53 ± 6	52 ± 6	44 ± 5	35 ± 4	44 ± 5
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	161 ± 16	158 ± 16	124 ± 12	105 ± 10	127 ± 12
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	84 ± 9	83 ± 9	78 ± 9	66 ± 8	82 ± 9
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	140 ± 40	170 ± 40	170 ± 40	200 ± 40	190 ± 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 ..	0.8 ± 0.1	4.0 ± 0.6	0.9 ± 0.1
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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 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 ..	580 ± 100	140 ± 30



Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Fill Material: Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 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	11.2 ± 0.2	11.3 ± 0.2	11.3 ± 0.2
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	43 ± 6	38 ± 5	29 ± 4	19 ± 3	17 ± 3
Cadmium	EG005T	1	mg/kg	----	3	1 ± 0.2	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	53 ± 6	52 ± 6	44 ± 5	35 ± 4	44 ± 5
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	161 ± 16	158 ± 16	124 ± 12	105 ± 10	127 ± 12
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	84 ± 9	83 ± 9	78 ± 9	66 ± 8	82 ± 9
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	140 ± 40	170 ± 40	170 ± 40	200 ± 40	190 ± 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 ..	0.8 ± 0.1	4.0 ± 0.6	0.9 ± 0.1
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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	415_08_50_S	415_08_50_S	415_12_00_S	415_16_21_S	415_16_21_S
						S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 08:50	15-Apr-2022 08:50	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21
						EM2206959-011 MU	EM2206959-012 MU	EM2206959-013 MU	EM2206959-014 MU	EM2206959-015 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 ..	580 ± 100	140 ± 30



Soil Hazard Categorisation and Management

Table 2: Soil Hazard Categorisation Thresholds : Category B: Table 2: Soil Hazard Categorisation Thresholds : Category B

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	415_20_06_S	416_00_20_S	416_04_08_S	414_09_01_S	414_09_02_S
						S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
						EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	11.0 ± 0.2	10.8 ± 0.2	7.7 ± 0.1	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	18 ± 3	19 ± 3	45 ± 6	----	----
Cadmium	EG005T	1	mg/kg	----	400	<1 --	<1 --	<1 --	----	----
Copper	EG005T	5	mg/kg	----	20000	44 ± 5	46 ± 6	62 ± 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	134 ± 13	138 ± 14	134 ± 13	----	----
Selenium	EG005T	5	mg/kg	----	200	<5 --	<5 --	<5 --	----	----
Silver	EG005T	2	mg/kg	----	720	<2 --	<2 --	<2 --	----	----
Zinc	EG005T	5	mg/kg	----	140000	77 ± 9	81 ± 9	89 ± 10	----	----
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	170 ± 40	170 ± 40	140 ± 30	----	----
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 --	1.8 ± 0.3	<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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 415_20_06_S S_Primary_AL S	SX_IB_20220 416_00_20_S S_Primary_AL S	SX_OB_20220 416_04_08_S S_Primary_AL S	SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
						EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 415_20_06_S S_Primary_AL S	SX_IB_20220 416_00_20_S S_Primary_AL S	SX_OB_20220 416_04_08_S S_Primary_AL S	SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS
				Lower Limit	Upper Limit	15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
						EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	11.0 ±0.2	10.8 ±0.2	7.7 ±0.1	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	18 ±3	19 ±3	45 ±6	----	----
Cadmium	EG005T	1	mg/kg	----	100	<1 --	<1 --	<1 --	----	----
Copper	EG005T	5	mg/kg	----	5000	44 ±5	46 ±6	62 ±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	134 ±13	138 ±14	134 ±13	----	----
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	77 ±9	81 ±9	89 ±10	----	----
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	170 ±40	170 ±40	140 ±30	----	----
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 --	1.8 ±0.3	<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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 415_20_06_S S_Primary_AL S	SX_IB_20220 416_00_20_S S_Primary_AL S	SX_OB_20220 416_04_08_S S_Primary_AL S	SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS					
				Guideline	Guideline						15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
											EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	415_20_06_S	416_00_20_S	416_04_08_S	414_09_01_S	414_09_02_S
						S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
						EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	11.0 ±0.2	10.8 ±0.2	7.7 ±0.1	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	18 ±3	19 ±3	45 ±6	----	----
Cadmium	EG005T	1	mg/kg	----	3	<1 --	<1 --	<1 --	----	----
Copper	EG005T	5	mg/kg	----	100	44 ±5	46 ±6	62 ±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	134 ±13	138 ±14	134 ±13	----	----
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	77 ±9	81 ±9	89 ±10	----	----
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	170 ±40	170 ±40	140 ±30	----	----
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 --	1.8 ±0.3	<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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 415_20_06_S S_Primary_AL S	SX_IB_20220 416_00_20_S S_Primary_AL S	SX_OB_20220 416_04_08_S S_Primary_AL S	SX_OB_20220 414_09_01_S S_Primary_AL S	SX_OB_20220 414_09_02_S S_Duplicate_ ALS
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						15-Apr-2022 20:06	16-Apr-2022 00:20	16-Apr-2022 04:08	14-Apr-2022 09:01	14-Apr-2022 09:02
						EM2206959-016 MU	EM2206959-017 MU	EM2206959-018 MU	EM2206959-019 MU	EM2206959-020 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220 414_09_03_S S_Primary_AL S	SX_OB_20220 414_11_54_S S_Primary_AL S	SX_OB_20220 414_15_47_S S_Primary_AL S	SX_OB_20220 414_15_52_S S_Triplicate_ ALS	SX_OB_20220 414_20_14_S S_Primary_AL S
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						14-Apr-2022 09:03	14-Apr-2022 11:54	14-Apr-2022 15:47	14-Apr-2022 00:14	14-Apr-2022 20:14
						EM2206959-021 MU	EM2206959-022 MU	EM2206959-023 MU	EM2206959-024 MU	EM2206959-025 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	415_00_14_S	415_04_17_S	415_08_41_S	415_08_50_S	415_08_50_S
						S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	15-Apr-2022 00:14	15-Apr-2022 04:17	15-Apr-2022 08:41	15-Apr-2022 08:50	15-Apr-2022 08:50
						EM2206959-026 MU	EM2206959-027 MU	EM2206959-028 MU	EM2206959-029 MU	EM2206959-030 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): 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

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 415_12_00_S S_Primary_AL S	SX_IB_20220 415_16_21_S S_Primary_AL S	SX_IB_20220 415_16_21_S S_Duplicate_ ALS	SX_IB_20220 415_20_06_S S_Primary_AL S	SX_IB_20220 416_00_20_S S_Primary_AL S
				Guideline	Guideline	15-Apr-2022 12:00	15-Apr-2022 16:21	15-Apr-2022 16:21	15-Apr-2022 20:06	16-Apr-2022 00:20
				Lower Limit	Upper Limit	EM2206959-031 MU	EM2206959-032 MU	EM2206959-033 MU	EM2206959-034 MU	EM2206959-035 MU
Sampling date/time										
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): 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

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220 416_04_08_S S_Primary_AL S	----	----	----	----
				Guideline	Guideline					
				Lower Limit	Upper Limit	16-Apr-2022 04:08	----	----	----	----
						EM2206959-036 MU				
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): 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										

QUALITY CONTROL REPORT

Work Order	: EM2206959	Page	: 1 of 34
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Josh Alexander
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 16-Apr-2022
Order number	: ----	Date Analysis Commenced	: 16-Apr-2022
C-O-C number	: 20220417083056-ALS-8	Issue Date	: 22-Apr-2022
Sampler	: DL - Agon, Hannah - EP Risk, TB - Agon		
Site	: 20220417083056-ALS-8		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 40		
No. of samples analysed	: 40		



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
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic 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: 4290000)									
EM2206892-008	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	337	# 492	37.5	0% - 20%
EM2206892-022	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	272	312	13.9	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	396	# 269	38.3	0% - 20%
EM2206892-008	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	2	1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	22	33	40.8	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	30	34	12.8	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	13	13	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	128	124	3.1	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	12	6	65.3	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	1670	1430	15.8	0% - 20%
		EM2206892-022	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1
EG005T: Chromium	7440-47-3			2	mg/kg	20	26	27.6	0% - 50%
EG005T: Molybdenum	7439-98-7			2	mg/kg	<2	<2	0.0	No Limit
EG005T: Nickel	7440-02-0			2	mg/kg	26	30	15.7	0% - 50%
EG005T: Silver	7440-22-4			2	mg/kg	<2	<2	0.0	No Limit
EG005T: Arsenic	7440-38-2			5	mg/kg	22	15	34.6	No Limit
EG005T: Copper	7440-50-8			5	mg/kg	22	29	28.6	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
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4290002)									



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: 4290002) - continued									
EM2206959-008	SX_OB_20220415_00_14_SS_Primary_ALS	EG005T: Zinc	7440-66-6	5	mg/kg	80	79	0.0	0% - 50%
EM2206959-008	SX_OB_20220415_00_14_SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	2	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	124	119	4.5	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	180	165	8.5	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	41	47	13.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	66	53	20.7	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	10	<5	69.2	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
EM2206959-017	SX_IB_20220416_00_20_SS_Primary_ALS	EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	102	105	3.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	138	141	2.2	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	19	21	9.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	46	48	2.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4291586)									
EM2206959-001	SX_OB_20220414_09_01_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.5	7.6	1.6	0% - 20%
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	10.3	10.3	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4290103)									
EM2206959-001	SX_OB_20220414_09_01_SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	29.3	34.8	17.1	0% - 20%
EM2206959-011	SX_OB_20220415_08_50_SS_Triplicate_ALS	EA055: Moisture Content	----	0.1	%	26.4	27.6	4.6	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4290001)									
EM2206892-008	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.2	0.2	0.0	No Limit
EM2206892-022	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.2	0.2	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4290003)									



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 (%)	
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4290003) - continued										
EM2206959-008	SX_OB_20220415_00_14_ SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EM2206959-017	SX_IB_20220416_00_20_S S_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: 4290059)										
EM2206720-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM2206959-007	SX_OB_20220414_20_14_ SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit	
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4290060)										
EM2206959-018	SX_OB_20220416_04_08_ SS_Primary_ALS	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: 4293593)										
EM2206720-003	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	1	<1	0.0	No Limit	
EM2206959-007	SX_OB_20220414_20_14_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit	
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4293594)										
EM2206959-018	SX_OB_20220416_04_08_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit	
EM2206998-011	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit	
EK040T: Fluoride Total (QC Lot: 4290058)										
EM2206892-025	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	180	200	10.4	No Limit	
EM2206959-009	SX_OB_20220415_04_17_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	120	140	19.8	No Limit	
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4290046)										
EM2206959-001	SX_OB_20220414_09_01_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4289969)										
EM2206959-001	SX_OB_20220414_09_01_ 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	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		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	



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: 4289969) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	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: 4289969)									
EM2206959-001	SX_OB_20220414_09_01_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4289969)									
EM2206959-001	SX_OB_20220414_09_01_ 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: 1,1,1,2-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		
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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		



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: 4289969) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	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: 4290048)									
EM2206959-001	SX_OB_20220414_09_01_ 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	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2206959-001	SX_OB_20220414_09_01_ 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
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4290048)									



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: 4290048) - continued									
EM2206959-001	SX_OB_20220414_09_01_ SS_Primary_ALS	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
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4290048)									
EM2206959-001	SX_OB_20220414_09_01_ 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		
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	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: 4290048) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	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: 4290048)									
EM2206959-001	SX_OB_20220414_09_01_ 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
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	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 (%)
EP075I: Organochlorine Pesticides (QC Lot: 4290048) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	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: 4289969)									
EM2206959-001	SX_OB_20220414_09_01_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4290047)									
EM2206959-001	SX_OB_20220414_09_01_ 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
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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: 4289969)									
EM2206959-001	SX_OB_20220414_09_01_ 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



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: 4289969) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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: 4290047)									
EM2206959-001	SX_OB_20220414_09_01_ 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
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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: 4294635)									
EM2206720-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2206959-009	SX_OB_20220415_04_17_ 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: 4294635)									
EM2206720-003	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (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 (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4294635) - continued									
EM2206959-009	SX_OB_20220415_04_17_ 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 (PFTTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTTeDA)	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: 4294635)									
EM2206720-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		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
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2206959-009	SX_OB_20220415_04_17_ 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
		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: 4294635)									



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: 4294635) - continued									
EM2206720-003	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
EM2206959-009	SX_OB_20220415_04_17_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: 4294635)

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EM2206720-003	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
EM2206959-009	SX_OB_20220415_04_17_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: 4293233)									
EM2206959-001	SX_OB_20220414_09_01_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
EM2206959-011	SX_OB_20220415_08_50_SS_Triplicate_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



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: 4293233) - continued									
EM2206959-011	SX_OB_20220415_08_50_SS_Triplicate_ALS	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: 4293234)									
EM2206959-019	SX_OB_20220414_09_01_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
EM2206959-028	SX_IB_20220415_08_41_S_S_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: 4294552)									
EM2206432-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.18	0.20	12.1	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.19	0.17	6.6	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.06	0.08	28.7	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.04	0.04	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
EM2206603-005	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.07	0.08	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.14	0.13	11.2	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<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: 4293233)									
EM2206959-001	SX_OB_20220414_09_01_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



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: 4293233) - continued									
EM2206959-001	SX_OB_20220414_09_01_ SS_Primary_ALS	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
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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: 4293234)									
EM2206959-019	SX_OB_20220414_09_01_ 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		
EM2206959-028	SX_IB_20220415_08_41_S S_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: 4293234) - continued									
EM2206959-028	SX_IB_20220415_08_41_S S_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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4294552)									
EM2206432-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.49	0.46	6.3	0% - 20%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.34	0.31	7.3	0% - 50%
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.28	0.26	7.8	0% - 50%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.19	0.19	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
EM2206603-005	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		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
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4293233)									
EM2206959-001	SX_OB_20220414_09_01_ 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



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: 4293233) - continued									
EM2206959-001	SX_OB_20220414_09_01_SS_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2206959-011	SX_OB_20220415_08_50_SS_Triplicate_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: 4293234)									
EM2206959-019	SX_OB_20220414_09_01_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
EM2206959-028	SX_IB_20220415_08_41_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 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: 4293234) - continued									
EM2206959-028	SX_IB_20220415_08_41_S S_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
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4294552)									
EM2206432-001	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
EM2206603-005	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4293233)									
EM2206959-001	SX_OB_20220414_09_01_ 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



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: 4293233) - continued									
EM2206959-011	SX_OB_20220415_08_50_ SS_Triplicate_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: 4293234)									
EM2206959-019	SX_OB_20220414_09_01_ 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
EM2206959-028	SX_IB_20220415_08_41_S S_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: 4294552)									
EM2206432-001	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
EM2206603-005	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



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: 4294552) - continued									
EM2206603-005	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: 4293233)									
EM2206959-001	SX_OB_20220414_09_01_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
EM2206959-011	SX_OB_20220415_08_50_SS_Triplicate_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: 4293234)									
EM2206959-019	SX_OB_20220414_09_01_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
EM2206959-028	SX_IB_20220415_08_41_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: 4294552)									
EM2206432-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	1.79	1.71	4.6	0% - 20%
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.37	0.37	0.0	0% - 20%
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	1.73	1.67	3.5	0% - 20%
EM2206603-005	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.21	0.21	0.0	0% - 20%
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.21	0.21	0.0	0% - 20%
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	0.21	0.21	0.0	0% - 20%



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

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

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4290000)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	95.5	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	67.2	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	103	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	91.5	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	90.8	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	89.3	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	95.1	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	79.1	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	94.9	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	76.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4290002)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	92.5	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	63.3	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	100	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	88.9	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	89.7	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	74.9	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	93.8	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	77.5	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	96.2	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	75.2	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4290293)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.2	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4290294)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.2	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4291586)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	101	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4290001)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	81.2	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4290003)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	81.2	70.0	130



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4290059)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	81.8	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4290060)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	83.0	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4293593)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	96.5	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4293594)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	97.1	70.0	130
EK040T: Fluoride Total (QCLot: 4290058)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	85.2	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4290046)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	116	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4289969)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	84.5	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	85.4	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	80.0	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	4.2 mg/kg	79.2	65.2	112
	106-42-3							
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	80.9	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	79.5	68.4	110
EP074H: Naphthalene (QCLot: 4289969)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	86.7	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4289969)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	73.6	47.0	138
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	80.4	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	84.8	72.3	115
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	82.7	60.5	122
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	85.4	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	85.2	66.6	115
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	81.2	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	78.5	58.4	127
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	90.2	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	84.2	64.7	115
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	89.8	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	84.8	60.0	119
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	81.6	71.8	116
EP074-UT: 1,1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	87.0	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	73.2	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	85.4	70.3	113



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP074I: Volatile Halogenated Compounds (QCLot: 4289969) - continued									
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	82.0	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	86.8	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	79.0	48.4	120	
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4290048)									
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	88.4	74.5	126	
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	90.7	72.7	126	
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	90.8	73.5	132	
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	91.3	72.8	128	
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	90.4	73.3	134	
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	89.1	72.4	128	
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	86.5	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	88.7	71.9	128	
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	85.1	54.4	135	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4290048)									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	92.4	71.5	130	
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	90.4	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	96.2	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	90.0	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	89.3	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	60.2	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	101	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	77.4	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	86.7	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	74.3	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4290048)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	90.8	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	89.0	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	90.0	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	92.5	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	91.6	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	92.3	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	89.0	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	92.6	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	93.6	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	92.9	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	94.8	75.8	133	



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
						LCS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4290048) - continued								
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	94.2	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	91.9	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	93.1	72.9	135
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	91.5	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4290048)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	89.0	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	88.6	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	91.1	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	90.9	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	93.3	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	89.6	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	90.0	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	89.9	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	89.0	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	87.4	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	93.4	69.4	134
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	91.4	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	88.2	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	94.0	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	78.0	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	90.9	71.4	135
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	89.2	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	91.4	70.2	135
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	88.9	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	91.5	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4289969)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	97.7	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4290047)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	680 mg/kg	86.4	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2830 mg/kg	94.3	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1340 mg/kg	99.1	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	4850 mg/kg	94.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4289969)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	96.4	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: 4290047)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	980 mg/kg	93.1	75.4	132



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4290047) - continued									
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3210 mg/kg	109	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	270 mg/kg	77.2	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	4460 mg/kg	104	70.0	130	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4294635)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	105	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	103	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	78.8	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	112	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	97.0	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	91.8	59.0	134	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4294635)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	90.5	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.7	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.4	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.2	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.7	69.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.8	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.4	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.2	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.6	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTriDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.3	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	116	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4294635)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	90.6	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	90.1	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	91.0	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	125	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	87.2	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294635)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	91.6	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	91.9	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	100	65.0	137	



Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294635) - continued								
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	90.1	70.0	130
EP231P: PFAS Sums (QCLot: 4294635)								
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: 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: 4293233)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	99.7	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	99.8	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	100	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 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	99.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4293234)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	99.1	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	93.6	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	112	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	95.2	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4294552)								
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	99.9	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	93.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	92.6	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	89.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	87.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4293233)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	95.7	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	93.0	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	98.7	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	92.8	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	92.1	71.0	129



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4293233) - continued									
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	79.9	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	97.1	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	101	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4293234)									
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	117	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	94.6	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	97.1	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	93.6	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.7	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.7	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.8	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	103	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4294552)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	84.3	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	98.8	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.5	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	98.9	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	95.7	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	104	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	97.4	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.7	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: 4293233)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	100	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	113	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	102	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	102	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	136	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
					LCS	Low	High	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4293233) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	104	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4293234)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	105	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	113	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	90.0	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	110	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	110	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	113	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4294552)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	97.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	104	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	97.5	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.6	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	103	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	96.5	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4293233)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	95.9	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	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	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	73.8	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4293234)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	94.0	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	103	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	117	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	90.9	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294552)								
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	102	64.0	140



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
						LCS	Low	High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294552) - continued								
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	120	70.0	130
EP231P: PFAS Sums (QCLot: 4293233)								
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: 4293234)								
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: 4294552)								
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

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery(%)	Acceptable Limits (%)	
				MS	Low	High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4290000)							
EM2206892-011	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	101	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	91.2	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	91.1	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	103	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	99.0	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	89.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	# Not Determined	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4290002)							
EM2206959-009	SX_OB_20220415_04_17_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	# 74.0	78.0	124
EM2206959-009	SX_OB_20220415_04_17_SS_Primary_ALS	EG005T: Cadmium	7440-43-9	50 mg/kg	94.2	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	84.4	79.0	121



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4290002) - continued							
EM2206959-009	SX_OB_20220415_04_17_SS_Primary_ALS	EG005T: Copper	7440-50-8	250 mg/kg	97.6	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	93.4	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	98.0	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	90.4	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4290001)							
EM2206892-011	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	97.2	76.0	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4290003)							
EM2206959-009	SX_OB_20220415_04_17_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	95.9	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4290059)							
EM2206720-010	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	71.7	58.0	114
EM2206720-010	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	67.4	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4293593)							
EM2206720-010	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	107	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4293594)							
EM2206998-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	92.7	70.0	130
EK040T: Fluoride Total (QCLot: 4290058)							
EM2206959-001	SX_OB_20220414_09_01_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	87.9	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4290046)							
EM2206959-003	SX_OB_20220414_09_03_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	124	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4289969)							
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	66.9	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	70.9	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4289969)							
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	57.8	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	62.1	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	66.4	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4290048)							
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	83.8	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	101	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	57.5	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4290048)							
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP075-EM: Phenol	108-95-2	3 mg/kg	85.6	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	93.0	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4290048)							
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	87.2	42.6	138



Sub-Matrix: SOIL

				Matrix Spike (MS) Report					
				Spike	SpikeRecovery(%)	Acceptable Limits (%)			
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High		
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4290048) - continued									
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP075-EM: Pyrene	129-00-0	3 mg/kg	83.1	37.8	152		
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4289969)									
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	68.9	42.3	111		
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4290047)									
EM2206959-004	SX_OB_20220414_11_54_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	680 mg/kg	84.9	71.3	126		
		EP071-EM: C15 - C28 Fraction	----	2830 mg/kg	92.8	75.1	123		
		EP071-EM: C29 - C36 Fraction	----	1340 mg/kg	97.2	78.1	120		
		EP071-EM: C10 - C36 Fraction (sum)	----	4850 mg/kg	92.9	70.0	130		
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4289969)									
EM2206959-002	SX_OB_20220414_09_02_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	67.8	39.9	109		
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4290047)									
EM2206959-004	SX_OB_20220414_11_54_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	980 mg/kg	91.3	71.5	130		
		EP071-EM: >C16 - C34 Fraction	----	3210 mg/kg	107	76.9	119		
		EP071-EM: >C34 - C40 Fraction	----	270 mg/kg	75.8	65.3	139		
		EP071-EM: >C10 - C40 Fraction (sum)	----	4460 mg/kg	102	70.0	130		
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4294635)									
EM2206720-010	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	99.2	72.0	128		
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	83.1	73.0	123		
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	99.8	67.0	130		
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	118	70.0	132		
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	90.3	68.0	136		
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	97.4	59.0	134		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4294635)									
EM2206720-010	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	93.8	71.0	135		
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	87.3	69.0	132		
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	80.0	70.0	132		
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	90.0	71.0	131		
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	90.7	69.0	133		
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	92.9	72.0	129		
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	97.9	69.0	133		
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	94.0	64.0	136		
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	91.4	69.0	135		
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	91.2	66.0	139		
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	126	69.0	133		
		EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4294635)							
		EM2206720-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	95.4	67.0	137



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4294635) - continued							
EM2206720-010	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	95.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.0	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	99.6	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	93.9	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	109	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	112	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294635)							
EM2206720-010	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	94.0	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	115	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	# 59.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4293233)							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	100	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	91.9	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	95.1	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	104	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	89.4	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	109	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4293234)							
EM2206959-027	SX_OB_20220415_04_17_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	98.7	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	96.0	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	91.1	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	117	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	110	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	91.8	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4294552)							
EM2206432-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	108	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	92.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	91.4	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	102	69.0	134



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4294552) - continued							
EM2206432-003	Anonymous	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	84.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4293233)							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	93.1	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	93.4	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	99.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	97.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	100	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	105	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	89.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	107	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	103	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	98.8	71.0	132		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4293234)							
EM2206959-027	SX_OB_20220415_04_17_SS_Primary_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	109	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	93.7	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	97.0	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	90.3	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	98.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	91.2	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	65.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	99.2	71.0	132		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4294552)							
EM2206432-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	78.7	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	104	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	106	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	96.5	72.0	130
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	110	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	106	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	95.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	92.3	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	76.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	101	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4293233)							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	101	67.0	137



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: 4293233) - continued							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	111	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	123	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	100	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	110	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	114	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4293234)							
EM2206959-027	SX_OB_20220415_04_17_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	109	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	110	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	105	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	99.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	103	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	106	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	98.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4294552)							
EM2206432-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	104	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	104	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	90.7	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	88.0	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	99.3	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: 4293233)							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	98.9	63.0	143



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4293233) - continued							
EM2206959-010	SX_IB_20220415_08_41_SS_Primary_ALS	EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	107	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	112	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	70.5	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4293234)							
EM2206959-027	SX_OB_20220415_04_17_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	95.7	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	107	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	# 60.4	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4294552)							
EM2206432-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	99.0	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	105	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	118	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	80.0	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2206959	Page	: 1 of 21
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 16-Apr-2022
Site	: 20220417083056-ALS-8	Issue Date	: 22-Apr-2022
Sampler	: DL - Agon, Hannah - EP Risk, TB - Agon	No. of samples received	: 40
Order number	: ----	No. of samples analysed	: 40

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

- **NO** Method Blank value outliers occur.
- **NO** Laboratory Control outliers occur.
- Duplicate 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

- Quality Control Sample Frequency Outliers exist - please see following pages for full details.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EM2206892--008	Anonymous	Lead	7439-92-1	37.5 %	0% - 20%	RPD exceeds LOR based limits
EG005(ED093)T: Total Metals by ICP-AES	EM2206892--022	Anonymous	Zinc	7440-66-6	38.3 %	0% - 20%	RPD exceeds LOR based limits
Matrix Spike (MS) Recoveries							
EG005(ED093)T: Total Metals by ICP-AES	EM2206959--009	SX_OB_20220415_04_17_SS	Arsenic	7440-38-2	74.0 %	78.0-124%	Recovery less than lower data quality objective
EG005(ED093)T: Total Metals by ICP-AES	EM2206892--011	Anonymous	Zinc	7440-66-6	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2206720--010	Anonymous	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	59.0 %	70.0-130%	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	EM2206959--027	SX_OB_20220415_04_17_SS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	60.4 %	70.0-130%	Recovery less than lower data quality objective

Outliers : Frequency of Quality Control Samples

Matrix: **SOIL**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
Matrix Spikes (MS)					
Hexavalent Chromium by Alkaline Digestion and DA Finish	2	21	9.52	10.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
Container / Client Sample ID(s)							



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								
Miscellaneous Plastic Bucket (EA001) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	20-Apr-2022	21-Apr-2022	✓	20-Apr-2022	20-Apr-2022	✓
Miscellaneous Plastic Bucket (EA001) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	20-Apr-2022	22-Apr-2022	✓	20-Apr-2022	20-Apr-2022	✓
Miscellaneous Plastic Bucket (EA001) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	20-Apr-2022	23-Apr-2022	✓	20-Apr-2022	20-Apr-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Miscellaneous Plastic Bucket (EA055) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	----	----	----	16-Apr-2022	28-Apr-2022	✓
Miscellaneous Plastic Bucket (EA055) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	----	----	----	16-Apr-2022	29-Apr-2022	✓
Miscellaneous Plastic Bucket (EA055) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	----	----	----	16-Apr-2022	30-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES								
Miscellaneous Plastic Bucket (EG005T) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	11-Oct-2022	✓	19-Apr-2022	11-Oct-2022	✓
Miscellaneous Plastic Bucket (EG005T) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	12-Oct-2022	✓	19-Apr-2022	12-Oct-2022	✓
Miscellaneous Plastic Bucket (EG005T) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	13-Oct-2022	✓	19-Apr-2022	13-Oct-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	
EG035T: Total Recoverable Mercury by FIMS								
Miscellaneous Plastic Bucket (EG035T) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	12-May-2022	✓	20-Apr-2022	12-May-2022	✓
Miscellaneous Plastic Bucket (EG035T) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	13-May-2022	✓	20-Apr-2022	13-May-2022	✓
Miscellaneous Plastic Bucket (EG035T) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	14-May-2022	✓	20-Apr-2022	14-May-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)								
Miscellaneous Plastic Bucket (EG048G) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	20-Apr-2022	12-May-2022	✓	20-Apr-2022	27-Apr-2022	✓
Miscellaneous Plastic Bucket (EG048G) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	20-Apr-2022	13-May-2022	✓	20-Apr-2022	27-Apr-2022	✓
Miscellaneous Plastic Bucket (EG048G) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	20-Apr-2022	14-May-2022	✓	20-Apr-2022	27-Apr-2022	✓
EK026SF: Total CN by Segmented Flow Analyser								
Miscellaneous Plastic Bucket (EK026SF) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	20-Apr-2022	28-Apr-2022	✓	21-Apr-2022	04-May-2022	✓
Miscellaneous Plastic Bucket (EK026SF) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	20-Apr-2022	29-Apr-2022	✓	21-Apr-2022	04-May-2022	✓
Miscellaneous Plastic Bucket (EK026SF) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	20-Apr-2022	30-Apr-2022	✓	21-Apr-2022	04-May-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	
EK040T: Fluoride Total								
Miscellaneous Plastic Bucket (EK040T) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	20-Apr-2022	12-May-2022	✓	22-Apr-2022	12-May-2022	✓
Miscellaneous Plastic Bucket (EK040T) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	20-Apr-2022	13-May-2022	✓	22-Apr-2022	13-May-2022	✓
Miscellaneous Plastic Bucket (EK040T) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	20-Apr-2022	14-May-2022	✓	22-Apr-2022	14-May-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_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	18-Apr-2022	11-Oct-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	18-Apr-2022	12-Oct-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	18-Apr-2022	13-Oct-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_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	18-Apr-2022	11-Oct-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	18-Apr-2022	12-Oct-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	18-Apr-2022	13-Oct-2022	✓	----	----	----



Matrix: SOIL

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Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP066: Polychlorinated Biphenyls (PCB)								
Miscellaneous Plastic Bucket (EP066-EM) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP066-EM) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP066-EM) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons								
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	16-Apr-2022	21-Apr-2022	✓	19-Apr-2022	21-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	16-Apr-2022	22-Apr-2022	✓	19-Apr-2022	22-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	16-Apr-2022	23-Apr-2022	✓	19-Apr-2022	23-Apr-2022	✓
EP074H: Naphthalene								
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	16-Apr-2022	21-Apr-2022	✓	19-Apr-2022	21-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	16-Apr-2022	22-Apr-2022	✓	19-Apr-2022	22-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	16-Apr-2022	23-Apr-2022	✓	19-Apr-2022	23-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	
EP074I: Volatile Halogenated Compounds								
Miscellaneous Plastic Bucket (EP074-UT)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	16-Apr-2022	21-Apr-2022	✓	19-Apr-2022	21-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	16-Apr-2022	22-Apr-2022	✓	19-Apr-2022	22-Apr-2022	✓
Miscellaneous Plastic Bucket (EP074-UT)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	16-Apr-2022	23-Apr-2022	✓	19-Apr-2022	23-Apr-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)								
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-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	
EP075B: Polynuclear Aromatic Hydrocarbons								
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
EP075I: Organochlorine Pesticides								
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP075-EM)								
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-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									
Miscellaneous Plastic Bucket (EP074-UT)									
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	16-Apr-2022	21-Apr-2022	✓	19-Apr-2022	21-Apr-2022	✓	
Miscellaneous Plastic Bucket (EP071-EM)									
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓	
Miscellaneous Plastic Bucket (EP074-UT)									
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	16-Apr-2022	22-Apr-2022	✓	19-Apr-2022	22-Apr-2022	✓	
Miscellaneous Plastic Bucket (EP071-EM)									
SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓	
Miscellaneous Plastic Bucket (EP074-UT)									
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	16-Apr-2022	23-Apr-2022	✓	19-Apr-2022	23-Apr-2022	✓	
Miscellaneous Plastic Bucket (EP071-EM)									
SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-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 Recoverable Hydrocarbons - NEPM 2013 Fractions								
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	16-Apr-2022	21-Apr-2022	✓	19-Apr-2022	21-Apr-2022	✓
Miscellaneous Plastic Bucket (EP071-EM) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	19-Apr-2022	28-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	16-Apr-2022	22-Apr-2022	✓	19-Apr-2022	22-Apr-2022	✓
Miscellaneous Plastic Bucket (EP071-EM) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	19-Apr-2022	29-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
Miscellaneous Plastic Bucket (EP074-UT) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	16-Apr-2022	23-Apr-2022	✓	19-Apr-2022	23-Apr-2022	✓
Miscellaneous Plastic Bucket (EP071-EM) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	19-Apr-2022	30-Apr-2022	✓	19-Apr-2022	29-May-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	21-Apr-2022	11-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	21-Apr-2022	12-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	21-Apr-2022	13-Oct-2022	✓	21-Apr-2022	31-May-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	
EP231B: Perfluoroalkyl Carboxylic Acids								
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	21-Apr-2022	11-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	21-Apr-2022	12-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	21-Apr-2022	13-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	21-Apr-2022	11-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	21-Apr-2022	12-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	21-Apr-2022	13-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	21-Apr-2022	11-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	21-Apr-2022	12-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	21-Apr-2022	13-Oct-2022	✓	21-Apr-2022	31-May-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	
EP231P: PFAS Sums								
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS,	14-Apr-2022	21-Apr-2022	11-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS	SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS,	15-Apr-2022	21-Apr-2022	12-Oct-2022	✓	21-Apr-2022	31-May-2022	✓
Miscellaneous Plastic Bucket (EP231X) SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220416_04_08_SS_Primary_ALS	16-Apr-2022	21-Apr-2022	13-Oct-2022	✓	21-Apr-2022	31-May-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_20220414_09_18_SR_Rinsate_ALS,	SX_OB_20220414_09_19_SB_Blank_ALS	14-Apr-2022	20-Apr-2022	11-Oct-2022	✓	20-Apr-2022	11-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_IB_20220415_17_43_SB_Blank_ALS,	SX_IB_20220415_17_44_SR_Rinsate_ALS	15-Apr-2022	20-Apr-2022	12-Oct-2022	✓	20-Apr-2022	12-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS, SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS, SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS	18-Apr-2022	20-Apr-2022	15-Oct-2022	✓	20-Apr-2022	15-Oct-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	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X)								
SX_OB_20220414_09_18_SR_Rinsate_ALS, SX_OB_20220414_09_19_SB_Blank_ALS	14-Apr-2022	20-Apr-2022	11-Oct-2022	✓	20-Apr-2022	11-Oct-2022	✓	
HDPE (no PTFE) (EP231X)								
SX_IB_20220415_17_43_SB_Blank_ALS, SX_IB_20220415_17_44_SR_Rinsate_ALS	15-Apr-2022	20-Apr-2022	12-Oct-2022	✓	20-Apr-2022	12-Oct-2022	✓	
HDPE (no PTFE) (EP231X)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS, SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS, SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS	18-Apr-2022	20-Apr-2022	15-Oct-2022	✓	20-Apr-2022	15-Oct-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	
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X) SX_OB_20220414_09_18_SR_Rinsate_ALS,	SX_OB_20220414_09_19_SB_Blank_ALS	14-Apr-2022	20-Apr-2022	11-Oct-2022	✓	20-Apr-2022	11-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_IB_20220415_17_43_SB_Blank_ALS,	SX_IB_20220415_17_44_SR_Rinsate_ALS	15-Apr-2022	20-Apr-2022	12-Oct-2022	✓	20-Apr-2022	12-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS, SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS, SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS	18-Apr-2022	20-Apr-2022	15-Oct-2022	✓	20-Apr-2022	15-Oct-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	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X)								
SX_OB_20220414_09_18_SR_Rinsate_ALS, SX_OB_20220414_09_19_SB_Blank_ALS	14-Apr-2022	20-Apr-2022	11-Oct-2022	✓	20-Apr-2022	11-Oct-2022	✓	
HDPE (no PTFE) (EP231X)								
SX_IB_20220415_17_43_SB_Blank_ALS, SX_IB_20220415_17_44_SR_Rinsate_ALS	15-Apr-2022	20-Apr-2022	12-Oct-2022	✓	20-Apr-2022	12-Oct-2022	✓	
HDPE (no PTFE) (EP231X)								
SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS, SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS, SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS	18-Apr-2022	20-Apr-2022	15-Oct-2022	✓	20-Apr-2022	15-Oct-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_20220414_09_18_SR_Rinsate_ALS,	SX_OB_20220414_09_19_SB_Blank_ALS	14-Apr-2022	20-Apr-2022	11-Oct-2022	✓	20-Apr-2022	11-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_IB_20220415_17_43_SB_Blank_ALS,	SX_IB_20220415_17_44_SR_Rinsate_ALS	15-Apr-2022	20-Apr-2022	12-Oct-2022	✓	20-Apr-2022	12-Oct-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS, SX_OB_20220414_09_01_SS_Primary_ALS, SX_OB_20220414_09_03_SS_Primary_ALS, SX_OB_20220414_15_47_SS_Primary_ALS, SX_OB_20220414_20_14_SS_Primary_ALS, SX_OB_20220415_04_17_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Triplicate_ALS, SX_IB_20220415_12_00_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Duplicate_ALS, SX_IB_20220416_00_20_SS_Primary_ALS,	SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS, SX_OB_20220414_09_02_SS_Duplicate_ALS, SX_OB_20220414_11_54_SS_Primary_ALS, SX_OB_20220414_15_52_SS_Triplicate_ALS, SX_OB_20220415_00_14_SS_Primary_ALS, SX_IB_20220415_08_41_SS_Primary_ALS, SX_OB_20220415_08_50_SS_Primary_ALS, SX_IB_20220415_16_21_SS_Primary_ALS, SX_IB_20220415_20_06_SS_Primary_ALS, SX_OB_20220416_04_08_SS_Primary_ALS	18-Apr-2022	20-Apr-2022	15-Oct-2022	✓	20-Apr-2022	15-Oct-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	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	3	21	14.29	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	18	11.11	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	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	31	12.90	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	7	36	19.44	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	21	19.05	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	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	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	31	6.45	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	36	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	2	28	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	21	9.52	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	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	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	31	6.45	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	36	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	18	5.56	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	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	21	9.52	10.00	✖	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	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	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	19	5.26	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	31	6.45	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	36	8.33	5.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	6	55	10.91	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	55	5.45	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	55	5.45	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	55	5.45	5.00	✔	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl ₂ 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 CaCl ₂ 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 (SnCl ₂) (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 SnCl ₂ 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.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	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 CaCl ₂ extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ 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, Na ₂ SO ₄ 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.



<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.