

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C04.0320220607161130_01	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	5
Approx. Source Tunnel Chainage From	762	Approx. Source Tunnel Chainage To	762
Approx. Rings From	320	Approx. Rings To	320
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	C04.03	Start of Filling From (Time / date)	28/05/2022
Tonnes Put in Holding Bay No:	7621.46	Finish of Filling (Time / Date)	30/05/2022
Classified Volume (LCM)	4000	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1 : 153.85	Approx. Bank Cubic Meters (BCM)	.00

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_20220530_04_07_SS_Primary_ALS	SX_OB_20220529_16_02_SS_Primary_ALS	SX_OB_20220528_20_00_SS_Primary_EUF
SX_OB_20220530_04_00_SS_Primary_EUF	SX_OB_20220529_12_13_SS_Primary_EUF	SX_OB_20220528_19_54_SS_Primary_ALS
SX_OB_20220530_00_06_SS_Primary_EUF	SX_OB_20220529_12_00_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220529_08_09_SS_Primary_EUF	SX_OB_20220528_16_14_SS_Duplicate_EUF
SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_08_00_SS_Triplicate_EUF	SX_OB_20220528_16_13_SS_Primary_EUF
SX_OB_20220529_20_02_SS_Primary_EUF	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220528_16_09_SS_Primary_ALS
SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220528_12_23_SS_Primary_ALS
SX_OB_20220529_16_08_SS_Duplicate_EUF	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220528_12_06_SS_Primary_EUF
SX_OB_20220529_16_06_SS_Primary_EUF	SX_OB_20220529_03_55_SS_Primary_EUF	
Total Sample Numbers	26	Ratio Acceptable
Primary Sample Numbers	20	Yes
Classified Volume (LCM)	4000 m ³	
Volume: Sample Number Ratio (Samples per LCM)	1 : 153.85	

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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>	No
<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>	Yes
<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>	No
<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>	N/A
<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 - See section 4
<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?	No
C. Is IWRG 621.1 testing required for spoil in this Holding Bay, because the moving 95% UCL values for the previous 10 consecutive Holding Bays of spoil from this Domain are not below TC0?	Yes
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:	
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	26*	20	1 : 153.85	26	27	53	58.3	93	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Nickel	mg/kg	5	26*	20	1 : 153.85	26	53	103.5	111.9	150	60	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Fluoride	mg/kg	100	26*	20	1 : 153.85	25	<100	258	662.6	2600	450	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)

“*” - 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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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	26*	20	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	26*	20	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	26*	20	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	26*	20	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	26*	20	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	26*	20	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	26*	20	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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	<p style="margin-left: 40px;">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.</p> <p>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.</p> <p>2. Previous reviews of the presence of Fluoride in soil data outlined on the SAQP (Rev 5) were undertaken by AJJV (2019). The AJJV review of the consolidated data set identified:</p> <p style="margin-left: 40px;">Samples which reported elevated fluoride concentrations were found to be within the range the ambient background from the parent or similar material in the Victorian Soil Database:</p> <ul style="list-style-type: none"> i. Newer Volcanics Group – Maximum 820 mg/kg ii. Older Volcanics – Maximum 600 mg/kg iii. Sub-Basaltic Alluvium – Maximum 240 mg/kg <p style="margin-left: 40px;">In addition, the 95% UCLs calculated for Newer Volcanics Group and Older Volcanics, was 322.7 mg/kg and 225.1 mg/kg respectively, both of these values are below the 450mg/kg upper limit for spoil to be disposed of to the containment cell.</p> <p>A review of the Agon data for spoil reported in this data set shows:</p> <ul style="list-style-type: none"> • A similar ratio of test results > LOR compared to the overall data set; • If a ½ LOR is substituted for results reported as <LOR (of 100mg/kg), then like the AJJV 95% UCL, the calculation is less than the 450mg/kg upper limit for spoil to be disposed of to the containment cell. <p>The results also show that there are no synthetic compounds reported above the laboratory LOR, another indication that anthropogenic contamination is not present.</p>
2.	Default testing regime was implemented for all samples collected for the spoil in this holding bay prior to implementation of the reduced sampling scope, as specified within the SAQP.
3.	Test result outcomes can lead to two classification possibilities; however, the classification decision follows the preference of the waste management hierarchy.
4.	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.
5.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes

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6.	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.
7.	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.
8.	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.
9.	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

	Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	2	1	5	5	1	5	0.1	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
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
EPA Victoria IWRG621 Fill Upper Limits	20	3	100		1	300	1	40

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
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	M22-My0072178	28/05/2022	892967	Eurofins Environment ANZ	Normal		34	<1	43	69	<1	5.2	<0.1	<5
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	M22-My0072196	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	M22-My0072212	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	EM2210053005	28/05/2022	EM2210053	ALSE-Melbourne	Normal		35	<1	46	87	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	EM2210053022	28/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	EM2210053006	28/05/2022	EM2210053	ALSE-Melbourne	Normal		36	<1	37	60	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	EM2210053023	28/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	M22-My0072180	28/05/2022	892967	Eurofins Environment ANZ	Normal		48	<1	48	99	<1	6.9	<0.1	<5
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	M22-My0072198	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	M22-My0072214	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	M22-My0072181	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072180	56	<1	50	100	<1	7.3	<0.1	<5
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	M22-My0072199	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072198								
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	M22-My0072215	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072214								
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	EM2210053007	28/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072180	82	<1	69	104	<1.0	6	<0.1	<5
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	EM2210053024	28/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072214								
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	EM2210053008	28/05/2022	EM2210053	ALSE-Melbourne	Normal		56	<1	37	80	<1.0	6	<0.1	<5
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	EM2210053025	28/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	M22-My0072184	28/05/2022	892967	Eurofins Environment ANZ	Normal		65	<1	56	130	<1	5.2	<0.1	<5
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	M22-My0072200	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	M22-My0072216	28/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	M22-My0072185	29/05/2022	892967	Eurofins Environment ANZ	Normal		41	<1	41	81	<1	6.6	<0.1	<5
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	M22-My0072201	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	M22-My0072217	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	EM2210053009	29/05/2022	EM2210053	ALSE-Melbourne	Normal		54	<1	36	80	<1.0	8	<0.1	<5
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	EM2210053026	29/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	EM2210053010	29/05/2022	EM2210053	ALSE-Melbourne	Normal		27	<1	34	46	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	EM2210053027	29/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	EM2210053011	29/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053010	40	<1	54	86	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	EM2210053028	29/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053027								
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	M22-My0072186	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053010	93	<1	71	120	<1	9.8	<0.1	<5
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	M22-My0072202	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053010								
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	M22-My0072218	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053027								
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	M22-My0072187	29/05/2022	892967	Eurofins Environment ANZ	Normal		55	<1	44	94	<1	7.4	<0.1	<5
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	M22-My0072203	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	M22-My0072219	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	EM2210053012	29/05/2022	EM2210053	ALSE-Melbourne	Normal		32	<1	36	58	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	EM2210053029	29/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	M22-My0072188	29/05/2022	892967	Eurofins Environment ANZ	Normal		68	<1	49	90	<1	7.3	<0.1	<5
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	M22-My0072204	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	M22-My0072220	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	EM2210053013	29/05/2022	EM2210053	ALSE-Melbourne	Normal		75	<1	54	117	<1.0	8	<0.1	<5
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	EM2210053030	29/05/2022	EM2210053	ALSE-Melbourne	Normal									
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	M22-My0072189	29/05/2022	892967	Eurofins Environment ANZ	Normal		59	<1	40	110	<1	8.6	<0.1	<5
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	M22-My0072205	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	M22-My0072221	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	M22-My0072190	29/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072189	62	<1	38	97	<1	8.1	<0.1	<5
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	M22-My0072206	29/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072205								
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	M22-My0072222	29/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072221								
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	EM2210053014	29/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072189	53	<1	35	80	<1.0	6	<0.1	<5
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	EM2210053031	29/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072221								
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	M22-My0072191	29/05/2022	892967	Eurofins Environment ANZ	Normal		59	<1	59	110	<1	6.4	<0.1	<5
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	M22-My0072207	29/05/2022	892967	Eurofins Environment ANZ	Normal									
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	M22-My0072223	29/05/2022	892967	Eurofins Environment ANZ	Normal									

							Metals							
							Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	EM2210053017	29/05/2022	EM2210053	ALSE-Melbourne	Normal	35	<1	27	56	<1.0	<5	<0.1	<5
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	EM2210053032	29/05/2022	EM2210053	ALSE-Melbourne	Normal								
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	EM2210053018	30/05/2022	EM2210053	ALSE-Melbourne	Normal	51	<1	30	78	<1.0	6	<0.1	<5
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	EM2210053033	30/05/2022	EM2210053	ALSE-Melbourne	Normal								
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	M22-My0072192	30/05/2022	892967	Eurofins Environment ANZ	Normal	57	<1	36	110	<1	9.1	<0.1	<5
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	M22-My0072208	30/05/2022	892967	Eurofins Environment ANZ	Normal								
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	M22-My0072224	30/05/2022	892967	Eurofins Environment ANZ	Normal								
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	M22-My0072193	30/05/2022	892967	Eurofins Environment ANZ	Normal	50	<1	40	98	<1	8.1	<0.1	<5
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	M22-My0072209	30/05/2022	892967	Eurofins Environment ANZ	Normal								
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	M22-My0072225	30/05/2022	892967	Eurofins Environment ANZ	Normal								
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	EM2210053019	30/05/2022	EM2210053	ALSE-Melbourne	Normal	55	<1	47	84	<1.0	6	<0.1	<5
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	EM2210053034	30/05/2022	EM2210053	ALSE-Melbourne	Normal								

	Nickel	Selenium	Silver	Tin	Zinc	PAH															
						PAHs (Vic EPA List)	Benzo(a,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,f)fluoranthene	Benzo(e,h)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	5	5	2	10	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	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) 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	12,000	200	720		140,000	400										20					
EPA Victoria IWRG621 Category C Leached Upper Limits																					
EPA Victoria IWRG621 Category C Upper Limits	3,000	50	180	500	35,000	100									5						
EPA Victoria IWRG621 Fill Upper Limits	60	10	10	50	200	20									1						

Location Code	Field ID	Nickel	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(a,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,f)fluoranthene	Benzo(e,h)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	110	<5	<2	<10	87			<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	
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																					
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																					
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	111	<5	<2	<10	64	<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	
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS																					
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	102	<5	<2	<10	57	<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	
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	120	<5	<2	<10	88			<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	
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	130	<5	<2	<10	87			<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	
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	133	<5	<2	<10	66	<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	
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	92	<5	<2	<10	54	<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	
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS																					
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	140	<5	<2	<10	120			<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	
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																					
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																					
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	110	<5	<2	<10	80			<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	
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																					
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																					
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	74	<5	<2	<10	44	<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	
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	88	<5	<2	<10	49	<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	
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	137	<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	
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	120	<5	<2	<10	84			<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	
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	100	<5	<2	<10	72			<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	
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																					
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																					
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	105	<5	<2	<10	57	<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	
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS																					
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	130	<5	<2	<10	92			<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	
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																					
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	91	<5	<2	<10	54	<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	
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	100	<5	<2	<10	68			<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	
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	99	<5	<2	<10	65			<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	
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	79	<5	<2	<10	49	<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	
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	150	<5	<2	<10	99			<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	
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																					
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																					

		PAH																			
		Nickel mg/kg	Selenium mg/kg	Silver mg/kg	Tin mg/kg	Zinc mg/kg	PAHs (Vic EPA List) mg/kg	Benzo(b+j+k)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(e,h,i)perylene mg/kg	Benzo(k)fluoranthene mg/kg	Chrysene mg/kg	Dibenz(a,h)anthracene mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	73	<5	<2	<10	42	<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
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	53	<5	<2	<10	33	<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
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	73	<5	<2	<10	48		<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
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	110	<5	<2	<10	78		<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
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	60	<5	<2	<10	36	<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
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																				

								BTEX						TRH						
	Fluoranthene	Fluorene	Indeno(1,2,3-c-d)pyrene	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.1	0.1	0.1	0.1	0.2	0.3	20	20	50	50	100	100	50
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																				
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																				
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																				
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																				
EPA Victoria IWRG621 Category B Leached Upper Limits																				
EPA Victoria IWRG621 Category B Upper Limits							400	16												
EPA Victoria IWRG621 Category C Leached Upper Limits																				
EPA Victoria IWRG621 Category C Upper Limits							100	4												
EPA Victoria IWRG621 Fill Upper Limits							20	1												

Location Code	Field ID	Fluoranthene	Fluorene	Indeno(1,2,3-c-d)pyrene	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)
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																				
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																				
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS																				
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS																				
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																				
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																				
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																				
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																				
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																				
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS																				
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																				
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																				
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																				
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																				
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS																				
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																				
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																				
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																				
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																				
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																				
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																				
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS																				
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																				
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																				
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS																				
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																				
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																				
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																				
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																				
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																				
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	<0.5	<0.5	<0.5	<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
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																				
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																				

									BTEX						TRH						
		Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	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)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<0.5	<0.5	<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	
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<0.5	<0.5	<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	
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<0.5	<0.5	<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	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	<0.5	<0.5	<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	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<0.5	<0.5	<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	
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																				

	TPH					Organochlorine Pesticides																
	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	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)		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	20	20	50	50	50	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.03	
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	2,600				40,000			4.8				50								16		
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits	650				10,000			1.2				50								4		
EPA Victoria IWRG621 Fill Upper Limits	100				1,000																	

Location Code	Field ID	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	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)	
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																					
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																					
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS																					
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS																					
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																					
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																					
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																					
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																					
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																					
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																					
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS																					
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																					
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF	<20	<20	<50	<50	<50	<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		
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																					
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																					

		TPH					Organochlorine Pesticides														
		C6-C9 mg/kg	C10-C14 mg/kg	C15-C28 mg/kg	C29-C36 mg/kg	+C10-C36 (Sum of total) mg/kg	Aldrin mg/kg	Dieldrin mg/kg	Aldrin + Dieldrin mg/kg	DDD mg/kg	DDT mg/kg	4,4-DDE mg/kg	DDT+DDE+DDD mg/kg	Endosulfan I mg/kg	Endosulfan II mg/kg	Endrin mg/kg	Endrin ketone mg/kg	Endrin aldehyde mg/kg	Endosulfan sulphate mg/kg	Chlordane mg/kg	Chlordane (cis) mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<20	<50	<100	<100	<50	<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
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<20	<50	<100	<100	<50	<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
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<20	<20	<50	<50	<50	<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	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	<20	<20	<50	<50	<50	<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	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																				
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<20	<50	<100	<100	<50	<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
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																				

		Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA/Vic	Other organochlorine pesticides EPA/Vic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																					
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																					
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																					
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																					
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																					
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																					
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																					

		Phenols																			
		4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVIC	Phenols (non-halogenated) EPAVIC	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Di-noseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotolomer sulfonic acid (10:2 FTS)	8:2 Fluorotolomer sulfonic	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																		<0.00005		<0.00005
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																		<0.00005		<0.00005
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																		<0.00001		<0.00001
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																		<0.00001		<0.00001
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																		<0.00001		<0.00001
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																		<0.00001		<0.00001
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																		<0.00005		<0.00005

		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-perfluorooctanesulfonamid acetic acid (NEFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid	
		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
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.01		<0.005		<0.005	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.01		<0.005		<0.005	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00005		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002

		PFOS/PFOA																					
		acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptanoic acid (PFHpA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoronanesulfonic acid (PFNS)(trace)	Perfluorooctanoic acid (PFOA)	Perfluorooctane											
		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		
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00005
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00001		<0.00005
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00005
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00001		<0.00005
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005
C04.03	SX_OB_20220530_04_00_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	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00005
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00001		<0.00005

		sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PPrFS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS)		
		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	mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001		<0.00001	
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001		<0.00001	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	<0.00001
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	<0.00001
C04.03	SX_OB_20220530_04_00_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		<0.005
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	<0.00001
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	<0.00001
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<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	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001		<0.00001	

hydrocarbons		NA																		
	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	Arochlor 1242	
	mg/kg	mg/kg	mg/kg	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	mg/kg
C04.03	SX_OB_20220529_20_06_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	<0.50	<10.0	<0.05	3.6		
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS															<0.05				
C04.03	SX_OB_20220530_00_02_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	<0.50	<10.0	<0.05	23.5		
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS															<0.05				
C04.03	SX_OB_20220530_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	<10			<0.1	<0.1
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF															<0.05				
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF															<0.05				
C04.03	SX_OB_20220530_04_00_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	<10			<0.1	<0.1
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF															<0.05				
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF															<0.05				
C04.03	SX_OB_20220530_04_07_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	<0.50	<10.0	<0.05	17.1		
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS															<0.05				

		PCBs					Inorganics							Halogenated Benzenes						
		Arochlor 1248 mg/kg	Arochlor 1254 mg/kg	Arochlor 1221 mg/kg	Arochlor 1260 mg/kg	Arochlor 1016 mg/kg	PCBs (Sum of total) mg/kg	pH (after HCl) -	pH (Final) -	pH (Initial) -	pH of Leaching Fluid -	pH (aqueous extract) -	Fluoride mg/kg	Moisture Content (dried @ 103°C) %	Cyanide Total mg/kg	1,2,4-trichlorobenzene mg/kg	1,2-dichlorobenzene mg/kg	1,3-dichlorobenzene mg/kg	1,4-dichlorobenzene mg/kg	Bromobenzene mg/kg
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS					<0.1	1.1	5.1	8.3	5.0		170		<5	<0.50	<0.50		<0.50		
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS							9.6												
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS					<0.1	1.1	5.1	8.3	5.0		<100		<5	<0.50	<0.50		<0.50		
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS							9.0												
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.4	180	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF							5.0		5.0										
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF							8.2		7.1										
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.1	190	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF							4.9		5.0										
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF							8.4		7.1										
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS					<0.1	1.1	5.1	8.3	5.0		120		<5	<0.50	<0.50		<0.50		
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS							9.0												

	Halogenated Hydrocarbons						MAH						Solvents				SPOCAS	
	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
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	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																		
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																		
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																		
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																		
EPA Victoria IWRG621 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	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)	
C04.03	SX_OB_20220528_12_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		
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																			
C04.03	SX_OB_20220528_12_06_SS_Primary_EUF																			
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS	<0.50							<0.5		<0.5									8.0
C04.03	SX_OB_20220528_12_23_SS_Primary_ALS																			
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS	<0.50							<0.5		<0.5									7.8
C04.03	SX_OB_20220528_16_09_SS_Primary_ALS																			
C04.03	SX_OB_20220528_16_13_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		
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																			
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																			
C04.03	SX_OB_20220528_16_14_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		
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																			
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																			
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	<0.50							<0.5		<0.5									7.9
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																			
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS	<0.50							<0.5		<0.5									8.1
C04.03	SX_OB_20220528_19_54_SS_Primary_ALS																			
C04.03	SX_OB_20220528_20_00_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		
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																			
C04.03	SX_OB_20220528_20_00_SS_Primary_EUF																			
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																			
C04.03	SX_OB_20220529_03_55_SS_Primary_EUF																			
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS	<0.50							<0.5		<0.5									8.3
C04.03	SX_OB_20220529_04_03_SS_Primary_ALS																			
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	<0.50							<0.5		<0.5									8.0
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																			
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	<0.50							<0.5		<0.5									8.0
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																			
C04.03	SX_OB_20220529_08_00_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		
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																			
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																			
C04.03	SX_OB_20220529_08_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		
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																			
C04.03	SX_OB_20220529_08_09_SS_Primary_EUF																			
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS	<0.50							<0.5		<0.5									8.1
C04.03	SX_OB_20220529_12_00_SS_Primary_ALS																			
C04.03	SX_OB_20220529_12_13_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		
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																			
C04.03	SX_OB_20220529_12_13_SS_Primary_EUF																			
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS	<0.50							<0.5		<0.5									7.6
C04.03	SX_OB_20220529_16_02_SS_Primary_ALS																			
C04.03	SX_OB_20220529_16_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		
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																			
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																			
C04.03	SX_OB_20220529_16_08_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		
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																			
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																			
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	<0.50							<0.5		<0.5									7.8
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																			
C04.03	SX_OB_20220529_20_02_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		
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																			
C04.03	SX_OB_20220529_20_02_SS_Primary_EUF																			

		Halogenated Hydrocarbons					MAH						Solvents				SPOCAS		
		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	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	mg/kg	-
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS	<0.50						<0.5	<0.5										8.1
C04.03	SX_OB_20220529_20_06_SS_Primary_ALS																		
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS	<0.50						<0.5	<0.5										7.7
C04.03	SX_OB_20220530_00_02_SS_Primary_ALS																		
C04.03	SX_OB_20220530_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	
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																		
C04.03	SX_OB_20220530_00_06_SS_Primary_EUF																		
C04.03	SX_OB_20220530_04_00_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	
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																		
C04.03	SX_OB_20220530_04_00_SS_Primary_EUF																		
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS	<0.50						<0.5	<0.5										7.7
C04.03	SX_OB_20220530_04_07_SS_Primary_ALS																		

							Metals										
							Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							2	1	5	5	1	5	0.1	5	5	5	2
Location Code	Field ID	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	28/05/2022	892967	Eurofins Environment ANZ	Normal		48	<1	48	99	<1	6.9	<0.1	<5	120	<5	<2
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072180	56	<1	50	100	<1	7.3	<0.1	<5	130	<5	<2
RPD							15	0	4	1	0	6	0	0	8	0	0
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	28/05/2022	892967	Eurofins Environment ANZ	Normal		48	<1	48	99	<1	6.9	<0.1	<5	120	<5	<2
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072180	82	<1	69	104	<1.0	6	<0.1	<5	133	<5	<2
RPD							52	0	36	5	0	14	0	0	10	0	0
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	28/05/2022	892967	Eurofins Environment ANZ	Normal												
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072198											
RPD																	
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	28/05/2022	892967	Eurofins Environment ANZ	Normal												
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072214											
RPD																	
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	28/05/2022	892967	Eurofins Environment ANZ	Normal												
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072214											
RPD																	
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Normal		42	<1	48	81	<1.0	<5	<0.1	<5	134	<5	<2
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053001	41	<1	49	101	<1.0	<5	<0.1	<5	129	<5	<2
RPD							2	0	2	22	0	0	0	0	4	0	0
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Normal		42	<1	48	81	<1.0	<5	<0.1	<5	134	<5	<2
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053001	63	<1	61	130	<1	6.4	<0.1	<5	150	<5	<2
RPD							40	0	24	46	0	25	0	0	11	0	0
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Normal		42	<1	48	81	<1.0	<5	<0.1	<5	134	<5	<2
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053001											
RPD																	
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Normal												
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053020											
RPD																	
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS	28/05/2022	EM2210053	ALSE-Melbourne	Normal												
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF	28/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053020											
RPD																	
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	29/05/2022	892967	Eurofins Environment ANZ	Normal		59	<1	40	110	<1	8.6	<0.1	<5	100	<5	<2
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	29/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072189	62	<1	38	97	<1	8.1	<0.1	<5	99	<5	<2
RPD							5	0	5	13	0	6	0	0	1	0	0
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	29/05/2022	892967	Eurofins Environment ANZ	Normal		59	<1	40	110	<1	8.6	<0.1	<5	100	<5	<2
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072189	53	<1	35	80	<1.0	6	<0.1	<5	79	<5	<2
RPD							11	0	13	32	0	36	0	0	23	0	0
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	29/05/2022	892967	Eurofins Environment ANZ	Normal												
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF	29/05/2022	892967	Eurofins Environment ANZ	Field_D	M22-My0072205											
RPD																	
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF	29/05/2022	892967	Eurofins Environment ANZ	Normal												
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Interlab_D	M22-My0072221											
RPD																	
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Normal		27	<1	34	46	<1.0	<5	<0.1	<5	88	<5	<2
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053010	40	<1	54	86	<1.0	<5	<0.1	<5	137	<5	<2
RPD							39	0	45	61	0	0	0	0	44	0	0
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Normal		27	<1	34	46	<1.0	<5	<0.1	<5	88	<5	<2
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053010	93	<1	71	120	<1	9.8	<0.1	<5	120	<5	<2
RPD							110	0	70	89	0	65	0	0	31	0	0
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Normal		27	<1	34	46	<1.0	<5	<0.1	<5	88	<5	<2
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053010											
RPD																	
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Normal												
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Field_D	EM2210053027											
RPD																	
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS	29/05/2022	EM2210053	ALSE-Melbourne	Normal												
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF	29/05/2022	892967	Eurofins Environment ANZ	Interlab_D	EM2210053027											
RPD																	

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

Metals										
Arsenic	Cadmium	Copper	Chromium (II+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

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

			PAH																				
	Fin	Zinc	PAHs (Vic EPA List)	Benzo(b+j)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	Naphthalene	Phenanthrene	
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
	10	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	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	Fin	Zinc	PAHs (Vic EPA List)	Benzo(b+j)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	Naphthalene	Phenanthrene
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	<10	88			<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	<0.5	<0.5
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF	<10	87			<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	<0.5	<0.5
RPD		0	1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF	<10	88			<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	<0.5	<0.5
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS	<10	66	<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	<0.5	<0.5	<0.5	<0.5
RPD		0	29			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

		PAH																			
Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)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	Naphthalene	Phenanthrene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

		BTEX						TRH							TPH						
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)	Aldrin	Dieldrin
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

Organochlorine Pesticides

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	δ -BHC	γ -BHC (Lindane)	Methoxychlor
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

		Phenols																					
	Toxaphene	Organochlorine pesticides EPAVc	Other organochlorine pesticides EPAVc	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) EPAVc	Phenols (non-halogenated) EPAVc	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	
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
	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	1	5	
Location Code	Field ID																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							

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

			Phenols																		
Toxaphene	Organochlorine pesticides EPAV/c	Other organochlorine pesticides EPAV/c	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) EPAV/c	Phenols (non-halogenated) EPAV/c	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

EQL	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-Ethylperfluorooctane sulfonamide (NEFOSA)		N-ethylperfluorooctanesulfonamide acetic acid (NEFOSAA)		N-ethylperfluorooctanesulfonamide ethanol (NEFOSSE)		N-Methylperfluorooctane sulfonamide (MMeFOSA)		
	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	
0.4	5	20	0.5	1	20	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	0.005
Location Code	Field ID																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																						
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																						
RPD																							
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																						
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																						
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																						
RPD																							
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																						
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																						
RPD																							

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

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 (NEFOSA)	N-ethyl-perfluorooctanesulfonamid oacetic acid (NEFOSAA)	N-ethylperfluorooctanesulfon amidoethanol (NEFOSE)	N-Methyl perfluorooctane sulfonamide (NMeFOSA)
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

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

		PFOS/PFOA																							
		N-methylperfluorooctane sulfonamideacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamideethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHPS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)			
		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	mg/kg
EQL		0.00005	0.01	0.00005	0.005	0.00005	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
Location Code	Field ID																								
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD			0		0		0		0		0		0		0		0		0		0		0		0

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

PFOS/PFOA																					
N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)	
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

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

EQL	Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHS)	
	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
EQL	0.00001	0.005	0.00001	0.005	0.00005	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
Location Code	Field ID																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
RPD																						
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																					
RPD																						
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD																						
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD																						
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																					
RPD																						
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD																						
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD																						

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

Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)	
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

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

EQL	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	Chloromethane	cis-1,3-dichloropropene
	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg														
EQL	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.0001	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	0.5
Location Code	Field ID																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
RPD	0																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF																					
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS																					
RPD	0																					
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																					
RPD	0																					
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD	0																					
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD	0																					
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS																					
RPD	0																					
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS																					
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD	0																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF																					
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS																					
RPD	0																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																					
RPD	0																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
RPD	0																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS																					
RPD	0																					
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS																					
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF																					
RPD	0																					

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

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	Chloromethane	cis-1,3-dichloropropene
mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

Chlorinated Hydrocarbons															NA						
Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVc	Trichloroethene	Chlorinated hydrocarbons EPAVc	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	Arochlor 1242	Arochlor 1248	
mg/kg	mg/kg	mg/kg	mg/kg	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	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

PCBs					Inorganics								Halogenated Benzenes							Halog		
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	Iodomethane	Bromomethane	
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

EQL	enated Hydrocarbons			MAH						Solvents					SPOCAS
	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	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	-
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1

Location Code	Field ID	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	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
C04.03	SX_OB_20220528_16_13_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	
C04.03	SX_OB_20220528_16_14_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	
RPD		0	0	0	0		0	0	0	0	0	0	0	0	0	
C04.03	SX_OB_20220528_16_13_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	
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS					<0.5		<0.5								7.9
RPD								0								
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF															
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF															
RPD																
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF															
C04.03	SX_OB_20220528_16_14_SS_Duplicate_EUF															
RPD																
C04.03	SX_OB_20220528_16_13_SS_Primary_EUF															
C04.03	SX_OB_20220528_16_15_SS_Triplicate_ALS															
RPD																
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS					<0.5		<0.5								8.0
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS					<0.5		<0.5								8.0
RPD						0		0								0
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS					<0.5		<0.5								8.0
E05.02	SX_OB_20220528_08_14_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	
RPD								0								
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS					<0.5		<0.5								8.0
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF															
RPD																
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS															
E05.02	SX_OB_20220528_08_12_SS_Duplicate_ALS															
RPD																
E05.02	SX_OB_20220528_08_11_SS_Primary_ALS															
E05.02	SX_OB_20220528_08_14_SS_Triplicate_EUF															
RPD																
C04.03	SX_OB_20220529_16_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	
C04.03	SX_OB_20220529_16_08_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	
RPD		0	0	0	0		0	0	0	0	0	0	0	0	0	
C04.03	SX_OB_20220529_16_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	
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS					<0.5		<0.5								7.8
RPD								0								
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF															
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF															
RPD																
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF															
C04.03	SX_OB_20220529_16_08_SS_Duplicate_EUF															
RPD																
C04.03	SX_OB_20220529_16_06_SS_Primary_EUF															
C04.03	SX_OB_20220529_16_09_SS_Triplicate_ALS															
RPD																
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS					<0.5		<0.5								8.0
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS					<0.5		<0.5								8.0
RPD						0		0								0
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS					<0.5		<0.5								8.0
C04.03	SX_OB_20220529_08_00_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	
RPD								0								
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS					<0.5		<0.5								8.0
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF															
RPD																
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS															
C04.03	SX_OB_20220529_07_59_SS_Duplicate_ALS															
RPD																
C04.03	SX_OB_20220529_07_57_SS_Primary_ALS															
C04.03	SX_OB_20220529_08_00_SS_Triplicate_EUF															
RPD																

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

enated Hydrocarbons			MAH						Solvents				SPOCAS	
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	-

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for eac

***Interlab Duplicates are matched on a per compound basis as methods vary betwee

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C04.0320220607161130_01	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 5.17/06/2022 9:12:14 PM											
5	From File		WorkSheet_a.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				26		Number of Distinct Observations				22			
15					Number of Missing Observations				0					
16	Minimum				27		Mean				53			
17	Maximum				93		Median				54.5			
18	SD				15.82		Std. Error of Mean				3.102			
19	Coefficient of Variation				0.298		Skewness				0.559			
20														
21	Normal GOF Test													
22	Shapiro Wilk Test Statistic				0.955		Shapiro Wilk GOF Test							
23	5% Shapiro Wilk Critical Value				0.92		Data appear Normal at 5% Significance Level							
24	Lilliefors Test Statistic				0.121		Lilliefors GOF Test							
25	5% Lilliefors Critical Value				0.17		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				58.3		95% Adjusted-CLT UCL (Chen-1995)				58.47			
31									95% Modified-t UCL (Johnson-1978)				58.36	
32														
33	Gamma GOF Test													
34	A-D Test Statistic				0.416		Anderson-Darling Gamma GOF Test							
35	5% A-D Critical Value				0.744		Detected data appear Gamma Distributed at 5% Significance Level							
36	K-S Test Statistic				0.116		Kolmogorov-Smirnov Gamma GOF Test							
37	5% K-S Critical Value				0.171		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)				11.7		k star (bias corrected MLE)				10.37			
42	Theta hat (MLE)				4.532		Theta star (bias corrected MLE)				5.11			
43	nu hat (MLE)				608.2		nu star (bias corrected)				539.3			
44	MLE Mean (bias corrected)				53		MLE Sd (bias corrected)				16.46			
45									Approximate Chi Square Value (0.05)				486.5	
46	Adjusted Level of Significance				0.0398						Adjusted Chi Square Value		483.2	
47														
48	Assuming Gamma Distribution													
49	95% Approximate Gamma UCL (use when n>=50))				58.76		95% Adjusted Gamma UCL (use when n<50)				59.16			
50														
51	Lognormal GOF Test													
52	Shapiro Wilk Test Statistic				0.966		Shapiro Wilk Lognormal GOF Test							
53	5% Shapiro Wilk Critical Value				0.92		Data appear Lognormal at 5% Significance Level							
54	Lilliefors Test Statistic				0.134		Lilliefors Lognormal GOF Test							
55	5% Lilliefors Critical Value				0.17		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				3.927			
60	Maximum of Logged Data				4.533		SD of logged Data				0.304			
61														
62	Assuming Lognormal Distribution													
63	95% H-UCL				59.35		90% Chebyshev (MVUE) UCL				62.67			
64	95% Chebyshev (MVUE) UCL				67.04		97.5% Chebyshev (MVUE) UCL				73.09			
65	99% Chebyshev (MVUE) UCL				84.98									
66														
67	Nonparametric Distribution Free UCL Statistics													
68	Data appear to follow a Discernible Distribution at 5% Significance Level													

	A	B	C	D	E	F	G	H	I	J	K	L	
138	Assuming Lognormal Distribution												
139	95% H-UCL				114.1	90% Chebyshev (MVUE) UCL				120			
140	95% Chebyshev (MVUE) UCL				127.3	97.5% Chebyshev (MVUE) UCL				137.6			
141	99% Chebyshev (MVUE) UCL				157.7								
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				111.6	95% Jackknife UCL				111.9			
148	95% Standard Bootstrap UCL				111.4	95% Bootstrap-t UCL				111.5			
149	95% Hall's Bootstrap UCL				111.8	95% Percentile Bootstrap UCL				111.5			
150	95% BCA Bootstrap UCL				111.1								
151	90% Chebyshev(Mean, Sd) UCL				118.3	95% Chebyshev(Mean, Sd) UCL				125.1			
152	97.5% Chebyshev(Mean, Sd) UCL				134.4	99% Chebyshev(Mean, Sd) UCL				152.8			
153													
154	Suggested UCL to Use												
155	95% Student's-t UCL				111.9								
156													
157	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.												
158	Recommendations are based upon data size, data distribution, and skewness.												
159	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).												
160	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.												
161													
162	Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.												
163													
164													
165	Fluoride												
166													
167	General Statistics												
168	Total Number of Observations				26	Number of Distinct Observations				13			
169	Number of Detects				25	Number of Non-Detects				1			
170	Number of Distinct Detects				12	Number of Distinct Non-Detects				1			
171	Minimum Detect				120	Minimum Non-Detect				100			
172	Maximum Detect				2600	Maximum Non-Detect				100			
173	Variance Detects				239033	Percent Non-Detects				3.846%			
174	Mean Detects				258	SD Detects				488.9			
175	Median Detects				160	CV Detects				1.895			
176	Skewness Detects				4.967	Kurtosis Detects				24.77			
177	Mean of Logged Detects				5.172	SD of Logged Detects				0.591			
178													
179	Normal GOF Test on Detects Only												
180	Shapiro Wilk Test Statistic				0.257	Shapiro Wilk GOF Test							
181	5% Shapiro Wilk Critical Value				0.918	Detected Data Not Normal at 5% Significance Level							
182	Lilliefors Test Statistic				0.475	Lilliefors GOF Test							
183	5% Lilliefors Critical Value				0.173	Detected Data Not Normal at 5% Significance Level							
184	Detected Data Not Normal at 5% Significance Level												
185													
186	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs												
187	KM Mean				251.9	KM Standard Error of Mean				94.22			
188	KM SD				470.7	95% KM (BCA) UCL				444.2			
189	95% KM (t) UCL				412.9	95% KM (Percentile Bootstrap) UCL				440.4			
190	95% KM (z) UCL				406.9	95% KM Bootstrap t UCL				1988			
191	90% KM Chebyshev UCL				534.6	95% KM Chebyshev UCL				662.6			
192	97.5% KM Chebyshev UCL				840.3	99% KM Chebyshev UCL				1189			
193													
194	Gamma GOF Tests on Detected Observations Only												
195	A-D Test Statistic				5.944	Anderson-Darling GOF Test							
196	5% A-D Critical Value				0.763	Detected Data Not Gamma Distributed at 5% Significance Level							
197	K-S Test Statistic				0.384	Kolmogorov-Smirnov GOF							
198	5% K-S Critical Value				0.178	Detected Data Not Gamma Distributed at 5% Significance Level							
199	Detected Data Not Gamma Distributed at 5% Significance Level												
200													
201	Gamma Statistics on Detected Data Only												
202	k hat (MLE)				1.456	k star (bias corrected MLE)				1.308			
203	Theta hat (MLE)				177.1	Theta star (bias corrected MLE)				197.2			
204	nu hat (MLE)				72.82	nu star (bias corrected)				65.41			
205	Mean (detects)				258								

	A	B	C	D	E	F	G	H	I	J	K	L
206	Gamma ROS Statistics using Imputed Non-Detects											
207	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
208	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
209	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
210	This is especially true when the sample size is small.											
211	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
212	Minimum	0.01		Mean	248.1							
213	Maximum	2600		Median	155							
214	SD	481.7		CV	1.942							
215	k hat (MLE)	0.824		k star (bias corrected MLE)	0.754							
216	Theta hat (MLE)	301.2		Theta star (bias corrected MLE)	328.9							
217	nu hat (MLE)	42.83		nu star (bias corrected)	39.22							
218	Adjusted Level of Significance (β)	0.0398										
219	Approximate Chi Square Value (39.22, α)	25.87		Adjusted Chi Square Value (39.22, β)	25.16							
220	95% Gamma Approximate UCL (use when $n \geq 50$)	376		95% Gamma Adjusted UCL (use when $n < 50$)	386.7							
221												
222	Estimates of Gamma Parameters using KM Estimates											
223	Mean (KM)	251.9		SD (KM)	470.7							
224	Variance (KM)	221569		SE of Mean (KM)	94.22							
225	k hat (KM)	0.286		k star (KM)	0.279							
226	nu hat (KM)	14.89		nu star (KM)	14.51							
227	theta hat (KM)	879.5		theta star (KM)	902.9							
228	80% gamma percentile (KM)	379		90% gamma percentile (KM)	749							
229	95% gamma percentile (KM)	1179		99% gamma percentile (KM)	2308							
230												
231	Gamma Kaplan-Meier (KM) Statistics											
232	Approximate Chi Square Value (14.51, α)	6.922		Adjusted Chi Square Value (14.51, β)	6.577							
233	95% Gamma Approximate KM-UCL (use when $n \geq 50$)	528.1		95% Gamma Adjusted KM-UCL (use when $n < 50$)	555.8							
234												
235	Lognormal GOF Test on Detected Observations Only											
236	Shapiro Wilk Test Statistic	0.497		Shapiro Wilk GOF Test								
237	5% Shapiro Wilk Critical Value	0.918		Detected Data Not Lognormal at 5% Significance Level								
238	Lilliefors Test Statistic	0.295		Lilliefors GOF Test								
239	5% Lilliefors Critical Value	0.173		Detected Data Not Lognormal at 5% Significance Level								
240	Detected Data Not Lognormal at 5% Significance Level											
241												
242	Lognormal ROS Statistics Using Imputed Non-Detects											
243	Mean in Original Scale	250.5		Mean in Log Scale	5.133							
244	SD in Original Scale	480.5		SD in Log Scale	0.613							
245	95% t UCL (assumes normality of ROS data)	411.5		95% Percentile Bootstrap UCL	437.7							
246	95% BCA Bootstrap UCL	535.9		95% Bootstrap t UCL	1816							
247	95% H-UCL (Log ROS)	263.5										
248												
249	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution											
250	KM Mean (logged)	5.15		KM Geo Mean	172.5							
251	KM SD (logged)	0.579		95% Critical H Value (KM-Log)	2.035							
252	KM Standard Error of Mean (logged)	0.116		95% H-UCL (KM -Log)	258							
253	KM SD (logged)	0.579		95% Critical H Value (KM-Log)	2.035							
254	KM Standard Error of Mean (logged)	0.116										
255												
256	DL/2 Statistics											
257	DL/2 Normal						DL/2 Log-Transformed					
258	Mean in Original Scale	250		Mean in Log Scale	5.123							
259	SD in Original Scale	480.8		SD in Log Scale	0.63							
260	95% t UCL (Assumes normality)	411.1		95% H-Stat UCL	266.2							
261	DL/2 is not a recommended method, provided for comparisons and historical reasons											
262												
263	Nonparametric Distribution Free UCL Statistics											
264	Data do not follow a Discernible Distribution at 5% Significance Level											
265												
266	Suggested UCL to Use											
267	95% KM (Chebyshev) UCL	662.6										
268												
269	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
270	Recommendations are based upon data size, data distribution, and skewness.											
271	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
272	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
273												
274												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C04.0320220607161130_01	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

CHAIN OF CUSTODY RECORD

Sydney Laboratory Unit F3 (Bldg 4) 44 Mary Road, Lane Cove West, NSW 1508
 Brisbane Laboratory Unit F1 21 Stalwood Place, Brisbane QLD 4172
 Perth Laboratory Unit F31 Leeson Highway, Kewdale WA 6105
 Melbourne Laboratory 6 Marley Road, Dandenong, Vic 3175

Company	AGON Environmental - Tunnel Spoil Testing		Project No	JC0927		Project Manager	Craig Timbur		Sampler(s)	Brandon - Agon LR - EP Risk TGT - Agon Martha - Agon	
Address	Unit H76, 69-85 Turner St, Port Melbourne VIC 3207		Project Name	WOTP-Tunnel Ref: 20220530043455-Eurofin-82		EDD Format	Edsat		Handed over by		
Contact Name	Craig Timbur David Lawson		Soil Sample Preparation Soils: WOTP-85-TST-PH/Phenol/PCP/PCB/VOC/Viol/Chlorox/Meals (As, Cd, Cr, Cu, Ni, Pb, Tg, Ag, Sn, Mo, Se, Zn) C6H6/CAN Total Fluoride/g/L PFAS Examined Suite - 0 L - ug/kg ASIP PFI 5 - PFAS (C1-10) ug/l Multi-Parameter - PFAS (C1-10) ug/l							Email for Invoicing: finance@agonenviro.com.au LabReports.TST@agonenviro.com.au Email for Results: LabReports.TST@agonenviro.com.au agonenvironmental@edsat.com.au motharhubble@results@wotp.com.au Amit.Kaur@agile-analytica.com.au	
Phone No	+61 400 826 907 (Craig) +61 400 411 004 (David)									Containers: 500mL Plastic, 125mL Plastic, 200mL Amber Glass, 40mL VOA vial, 600mL PFAS Bottle, Jar (Blank or HOPE)	
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with client sample receipt documentation.									Required Turnaround Time (TAT): Business 5 days, Full Report	
Purchase Order										<input type="checkbox"/> Overnight (reporting by Gen) + <input type="checkbox"/> Same day + 1 day + <input type="checkbox"/> Other ()	
Quote ID No	Agon WOTP TST									Sample Comments: / Dangerous Goods Hazard Warning	
No	Client Sample ID	Sampled Date/Time	Matrix								
1	SX_OB_20220528_08_14_SS_Triplicate_EUF	28/05/2022 08:14	S	X	X	X	X	X			
2	SX_OB_20220528_08_21_SS_Primary_EUF	28/05/2022 08:21	S	X	X	X	X	X			
3	SX_OB_20220528_12_06_SS_Primary_EUF	28/05/2022 12:06	S	X	X	X	X	X			
4	SX_OB_20220528_12_21_SS_Primary_EUF	28/05/2022 12:21	S	X	X	X	X	X			
5	SX_OB_20220528_16_12_SS_Primary_EUF	28/05/2022 16:13	S	X	X	X	X	X			
6	SX_OB_20220528_16_14_SS_Duplicate_EUF	28/05/2022 16:14	S	X	X	X	X	X			
7	SX_OB_20220528_16_47_SR_Blank_EUF	28/05/2022 16:47	W			X					
8	SX_OB_20220528_16_47_SS_Blank_EUF	28/05/2022 16:47	W			X					
9	SX_OB_20220528_20_00_SS_Primary_EUF	28/05/2022 20:00	S	X	X	X	X	X			
10	SX_OB_20220528_03_55_SS_Primary_EUF	28/05/2022 03:55	S	X	X	X	X	X			
11	SX_OB_20220528_08_00_SS_Primary_EUF	28/05/2022 08:00	S	X	X	X	X	X			
12	SX_OB_20220528_08_09_SS_Primary_EUF	28/05/2022 08:09	S	X	X	X	X	X			
13	SX_OB_20220528_12_19_SS_Primary_EUF	28/05/2022 12:13	S	X	X	X	X	X			
14	SX_OB_20220528_16_06_SS_Primary_EUF	28/05/2022 16:06	S	X	X	X	X	X			
15	SX_OB_20220528_16_08_SS_Duplicate_EUF	28/05/2022 16:08	S	X	X	X	X	X			
16	SX_OB_20220528_20_02_SS_Primary_EUF	28/05/2022 20:02	S	X	X	X	X	X			
17	SX_OB_20220530_00_06_SS_Primary_EUF	30/05/2022 00:06	S	X	X	X	X	X			
18	SX_OB_20220530_04_00_SS_Primary_EUF	30/05/2022 04:00	S	X	X	X	X	X			
19											
20											
21											
22											
23											
24											
25											
26											
27											
Total Counts				18	16	18	16	18			

Method of Transport	<input type="checkbox"/> Courier (R)	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Postal	Name	Signature	Date	Time
Laboratory Use Only	Received By	SYD BRN MEL PER AXL ATL DRY	Signature	Date	Time	Temperature	
	Received By	SYD BRN MEL PER AXL NT DRY	Signature	Date	Time	Report No	

30/05/2022 4:45PM
 10.6 10.0
 -0.1 10.5
 Jake
 892967
 L. Pughen

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 **892967-L**
Project name **20220530043455-Eurofin-52**
Project ID **JC0927**
Received Date **May 30, 2022**

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_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- My0072194	M22- My0072195	M22- My0072196	M22- My0072197
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	5.1	5.1	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	%	103	101	86	97
13C5-PFPeA (surr.)	1	%	111	94	85	76
13C5-PFHxA (surr.)	1	%	102	89	79	80
13C4-PFHpA (surr.)	1	%	96	91	83	52
13C8-PFOA (surr.)	1	%	107	107	91	91
13C5-PFNA (surr.)	1	%	95	93	88	111
13C6-PFDA (surr.)	1	%	92	81	85	115
13C2-PFUnDA (surr.)	1	%	74	52	96	140
13C2-PFDoDA (surr.)	1	%	73	48	91	118
13C2-PFTTeDA (surr.)	1	%	67	44	75	98

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_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- My0072194	M22- My0072195	M22- My0072196	M22- My0072197
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	16	20	95	85
D3-N-MeFOSA (surr.)	1	%	21	14	40	17
D5-N-EtFOSA (surr.)	1	%	26	18	30	15
D7-N-MeFOSE (surr.)	1	%	13	11	94	60
D9-N-EtFOSE (surr.)	1	%	20	16	81	57
D5-N-EtFOSAA (surr.)	1	%	60	53	84	116
D3-N-MeFOSAA (surr.)	1	%	63	48	82	126
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	%	103	109	58	68
18O2-PFHxS (surr.)	1	%	92	93	87	91
13C8-PFOS (surr.)	1	%	76	59	101	113
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	%	84	92	90	104
13C2-6:2 FTSA (surr.)	1	%	132	124	86	176
13C2-8:2 FTSA (surr.)	1	%	86	71	68	78
13C2-10:2 FTSA (surr.)	1	%	56	44	60	104
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 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_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- My0072198	M22- My0072199	M22- My0072200	M22- My0072201
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	4.9	4.9	5.0	4.9
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	%	96	109	108	93
13C5-PFPeA (surr.)	1	%	91	98	108	90
13C5-PFHxA (surr.)	1	%	89	92	102	88
13C4-PFHpA (surr.)	1	%	95	102	103	92
13C8-PFOA (surr.)	1	%	101	120	116	100
13C5-PFNA (surr.)	1	%	93	111	111	94
13C6-PFDA (surr.)	1	%	86	99	91	97
13C2-PFUnDA (surr.)	1	%	104	79	83	107
13C2-PFDoDA (surr.)	1	%	93	75	78	100
13C2-PFTTeDA (surr.)	1	%	48	64	79	64
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	%	33	21	17	91
D3-N-MeFOSA (surr.)	1	%	16	21	15	11
D5-N-EtFOSA (surr.)	1	%	18	28	18	17
D7-N-MeFOSE (surr.)	1	%	18	19	17	67
D9-N-EtFOSE (surr.)	1	%	15	24	22	48
D5-N-EtFOSAA (surr.)	1	%	97	67	71	101
D3-N-MeFOSAA (surr.)	1	%	95	56	59	102

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_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- My0072198	M22- My0072199	M22- My0072200	M22- My0072201
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	%	67	125	120	71
18O2-PFHxS (surr.)	1	%	100	102	102	96
13C8-PFOS (surr.)	1	%	107	79	76	116
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	%	108	110	107	101
13C2-6:2 FTSA (surr.)	1	%	96	124	131	88
13C2-8:2 FTSA (surr.)	1	%	55	82	102	62
13C2-10:2 FTSA (surr.)	1	%	82	55	56	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

Client Sample ID			SX_OB_20220 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_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- My0072202	M22- My0072203	M22- My0072204	M22- My0072205
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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	4.9	5.0	5.0

Client Sample ID			SX_OB_20220 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_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- My0072202	M22- My0072203	M22- My0072204	M22- My0072205
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	97	118	114	77
13C5-PFPeA (surr.)	1	%	94	113	123	84
13C5-PFHxA (surr.)	1	%	80	85	108	55
13C4-PFHpA (surr.)	1	%	86	101	114	72
13C8-PFOA (surr.)	1	%	93	131	119	80
13C5-PFNA (surr.)	1	%	83	119	104	78
13C6-PFDA (surr.)	1	%	72	102	100	78
13C2-PFUnDA (surr.)	1	%	60	77	73	66
13C2-PFDoDA (surr.)	1	%	54	67	72	57
13C2-PFTeDA (surr.)	1	%	52	38	53	47
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	%	12	18	20	11
D3-N-MeFOSA (surr.)	1	%	12	21	25	18
D5-N-EtFOSA (surr.)	1	%	13	30	23	16
D7-N-MeFOSE (surr.)	1	%	11	16	14	10
D9-N-EtFOSE (surr.)	1	%	14	22	21	15
D5-N-EtFOSAA (surr.)	1	%	54	62	61	51
D3-N-MeFOSAA (surr.)	1	%	41	56	63	45
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoronanesulfonic 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 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_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- My0072202	M22- My0072203	M22- My0072204	M22- My0072205
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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	%	99	123	111	76
18O2-PFHxS (surr.)	1	%	87	108	116	75
13C8-PFOS (surr.)	1	%	57	82	82	60
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	%	77	133	96	83
13C2-6:2 FTSA (surr.)	1	%	117	125	145	87
13C2-8:2 FTSA (surr.)	1	%	69	85	82	65
13C2-10:2 FTSA (surr.)	1	%	43	49	59	47
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 529_16_08_SS _Duplicate_EU F	SX_OB_20220 529_20_02_SS _Primary_EUF	SX_OB_20220 530_00_06_SS _Primary_EUF	SX_OB_20220 530_04_00_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- My0072206	M22- My0072207	M22- My0072208	M22- My0072209
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	4.9	5.0	5.0	4.9
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_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_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- My0072206	M22- My0072207	M22- My0072208	M22- My0072209
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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 (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	%	79	92	87	117
13C5-PFPeA (surr.)	1	%	87	73	85	123
13C5-PFHxA (surr.)	1	%	74	69	79	119
13C4-PFHpA (surr.)	1	%	76	78	82	109
13C8-PFOA (surr.)	1	%	86	64	92	125
13C5-PFNA (surr.)	1	%	85	71	88	107
13C6-PFDA (surr.)	1	%	87	53	95	108
13C2-PFUnDA (surr.)	1	%	102	32	128	87
13C2-PFDoDA (surr.)	1	%	95	48	116	76
13C2-PFTeDA (surr.)	1	%	71	62	88	54
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	%	95	31	106	18
D3-N-MeFOSA (surr.)	1	%	64	38	50	25
D5-N-EtFOSA (surr.)	1	%	55	48	39	31
D7-N-MeFOSE (surr.)	1	%	112	11	113	18
D9-N-EtFOSE (surr.)	1	%	93	54	95	23
D5-N-EtFOSAA (surr.)	1	%	90	41	108	71
D3-N-MeFOSAA (surr.)	1	%	98	48	114	69
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	52	61	59	130
18O2-PFHxS (surr.)	1	%	87	56	92	111
13C8-PFOS (surr.)	1	%	104	51	105	81

Client Sample ID			SX_OB_20220529_16_08_SS_Duplicate_EUF	SX_OB_20220529_20_02_SS_Primary_EUF	SX_OB_20220530_00_06_SS_Primary_EUF	SX_OB_20220530_04_00_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-My0072206	M22-My0072207	M22-My0072208	M22-My0072209
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	%	96	56	96	99
13C2-6:2 FTSA (surr.)	1	%	91	68	88	153
13C2-8:2 FTSA (surr.)	1	%	105	62	104	96
13C2-10:2 FTSA (surr.)	1	%	74	51	82	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_20220528_08_14_SS_Triplicate_EUF	SX_OB_20220528_08_21_SS_Primary_EUF	SX_OB_20220528_12_06_SS_Primary_EUF	SX_IB_20220528_12_21_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-My0072210	M22-My0072211	M22-My0072212	M22-My0072213
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	7.1	7.1	7.1	7.1
pH (off)	0.1	pH Units	8.0	7.3	8.5	8.5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (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	%	97	85	75	77

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_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- My0072210	M22- My0072211	M22- My0072212	M22- My0072213
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	98	98	81	77
13C5-PFHxA (surr.)	1	%	107	74	70	79
13C4-PFHpA (surr.)	1	%	101	81	80	62
13C8-PFOA (surr.)	1	%	117	93	93	94
13C5-PFNA (surr.)	1	%	108	93	88	92
13C6-PFDA (surr.)	1	%	110	89	94	111
13C2-PFUnDA (surr.)	1	%	99	78	88	84
13C2-PFDoDA (surr.)	1	%	97	71	84	72
13C2-PFTeDA (surr.)	1	%	60	54	70	51
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	%	28	45	45	46
D3-N-MeFOSA (surr.)	1	%	19	15	13	28
D5-N-EtFOSA (surr.)	1	%	12	13	13	27
D7-N-MeFOSE (surr.)	1	%	19	11	15	15
D9-N-EtFOSE (surr.)	1	%	11	13	20	17
D5-N-EtFOSAA (surr.)	1	%	88	68	81	79
D3-N-MeFOSAA (surr.)	1	%	83	66	60	65
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	%	110	95	94	84
18O2-PFHxS (surr.)	1	%	103	89	76	87
13C8-PFOS (surr.)	1	%	86	76	74	79

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_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- My0072210	M22- My0072211	M22- My0072212	M22- My0072213
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	80	69	72	82
13C2-6:2 FTSA (surr.)	1	%	158	111	105	99
13C2-8:2 FTSA (surr.)	1	%	102	76	87	87
13C2-10:2 FTSA (surr.)	1	%	59	50	48	54
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_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- My0072214	M22- My0072215	M22- My0072216	M22- My0072217
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	7.1	7.1	7.1	7.1
pH (off)	0.1	pH Units	8.6	8.7	8.5	8.7
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	%	87	94	78	98

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_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- My0072214	M22- My0072215	M22- My0072216	M22- My0072217
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	98	88	97	86
13C5-PFHxA (surr.)	1	%	75	83	81	95
13C4-PFHpA (surr.)	1	%	91	95	79	103
13C8-PFOA (surr.)	1	%	102	114	94	105
13C5-PFNA (surr.)	1	%	98	109	88	96
13C6-PFDA (surr.)	1	%	106	121	96	94
13C2-PFUnDA (surr.)	1	%	89	103	114	116
13C2-PFDoDA (surr.)	1	%	91	95	100	108
13C2-PFTeDA (surr.)	1	%	70	70	81	74
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	%	54	59	116	17
D3-N-MeFOSA (surr.)	1	%	19	14	59	15
D5-N-EtFOSA (surr.)	1	%	16	19	47	16
D7-N-MeFOSE (surr.)	1	%	17	15	119	19
D9-N-EtFOSE (surr.)	1	%	21	19	99	21
D5-N-EtFOSAA (surr.)	1	%	81	84	99	101
D3-N-MeFOSAA (surr.)	1	%	66	82	104	108
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	%	95	115	58	73
18O2-PFHxS (surr.)	1	%	95	98	85	103
13C8-PFOS (surr.)	1	%	81	88	107	103

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_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- My0072214	M22- My0072215	M22- My0072216	M22- My0072217
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	%	75	84	87	105
13C2-6:2 FTSA (surr.)	1	%	109	118	80	70
13C2-8:2 FTSA (surr.)	1	%	84	83	99	66
13C2-10:2 FTSA (surr.)	1	%	56	63	86	94
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 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_06_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- My0072218	M22- My0072219	M22- My0072220	M22- My0072221
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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	7.1	7.1	7.1	7.1
pH (off)	0.1	pH Units	8.8	8.6	8.8	8.6
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	90	84	60

Client Sample ID			SX_OB_20220 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_06_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- My0072218	M22- My0072219	M22- My0072220	M22- My0072221
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	82	88	89	63
13C5-PFHxA (surr.)	1	%	87	85	94	56
13C4-PFHpA (surr.)	1	%	90	88	93	63
13C8-PFOA (surr.)	1	%	104	98	108	76
13C5-PFNA (surr.)	1	%	95	91	104	77
13C6-PFDA (surr.)	1	%	95	100	99	80
13C2-PFUnDA (surr.)	1	%	112	106	94	65
13C2-PFDoDA (surr.)	1	%	105	100	102	62
13C2-PFTeDA (surr.)	1	%	66	65	79	51
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	%	102	81	48	29
D3-N-MeFOSA (surr.)	1	%	11	15	13	18
D5-N-EtFOSA (surr.)	1	%	19	12	12	15
D7-N-MeFOSE (surr.)	1	%	73	39	14	11
D9-N-EtFOSE (surr.)	1	%	52	27	19	15
D5-N-EtFOSAA (surr.)	1	%	109	107	85	63
D3-N-MeFOSAA (surr.)	1	%	99	96	80	53
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	%	68	63	103	75
18O2-PFHxS (surr.)	1	%	101	92	96	74
13C8-PFOS (surr.)	1	%	105	104	82	67

Client Sample ID			SX_OB_20220_529_08_00_SS_Primary_EUF	SX_OB_20220_529_08_09_SS_Primary_EUF	SX_OB_20220_529_12_13_SS_Primary_EUF	SX_OB_20220_529_16_06_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-My0072218	M22-My0072219	M22-My0072220	M22-My0072221
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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	%	96	96	70	54
13C2-6:2 FTSA (surr.)	1	%	80	82	132	83
13C2-8:2 FTSA (surr.)	1	%	68	72	93	66
13C2-10:2 FTSA (surr.)	1	%	83	81	59	49
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_529_16_08_SS_Duplicate_EUF	SX_OB_20220_529_20_02_SS_Primary_EUF	SX_OB_20220_530_00_06_SS_Primary_EUF	SX_OB_20220_530_04_00_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-My0072222	M22-My0072223	M22-My0072224	M22-My0072225
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	7.1	7.1	7.1	7.1
pH (off)	0.1	pH Units	8.5	8.6	8.2	8.4
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	%	83	104	88	91

Client Sample ID			SX_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_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- My0072222	M22- My0072223	M22- My0072224	M22- My0072225
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	109	116	102	85
13C5-PFHxA (surr.)	1	%	75	115	74	95
13C4-PFHpA (surr.)	1	%	90	109	110	92
13C8-PFOA (surr.)	1	%	105	121	115	115
13C5-PFNA (surr.)	1	%	101	120	115	92
13C6-PFDA (surr.)	1	%	112	143	128	99
13C2-PFUnDA (surr.)	1	%	96	107	106	116
13C2-PFDoDA (surr.)	1	%	94	95	87	101
13C2-PFTeDA (surr.)	1	%	66	37	41	57
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	%	37	59	32	96
D3-N-MeFOSA (surr.)	1	%	12	18	17	12
D5-N-EtFOSA (surr.)	1	%	18	18	12	14
D7-N-MeFOSE (surr.)	1	%	15	14	15	65
D9-N-EtFOSE (surr.)	1	%	19	19	17	42
D5-N-EtFOSAA (surr.)	1	%	77	89	88	104
D3-N-MeFOSAA (surr.)	1	%	84	84	88	100
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	%	103	119	108	88
18O2-PFHxS (surr.)	1	%	94	104	112	102
13C8-PFOS (surr.)	1	%	79	101	93	113

Client Sample ID			SX_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_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- My0072222	M22- My0072223	M22- My0072224	M22- My0072225
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	%	91	56	89	94
13C2-6:2 FTSA (surr.)	1	%	118	63	112	87
13C2-8:2 FTSA (surr.)	1	%	100	80	110	90
13C2-10:2 FTSA (surr.)	1	%	64	65	57	78
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	May 31, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 31, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 31, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 30, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220528_08_14_S_S_Triplicate_EUF	May 28, 2022	8:14AM	Soil	M22-My0072176		X	X	X
2	SX_OB_20220528_08_21_S_S_Primary_EUF	May 28, 2022	8:21AM	Soil	M22-My0072177		X	X	X
3	SX_OB_20220528_12_06_S_S_Primary_EUF	May 28, 2022	12:06PM	Soil	M22-My0072178		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									
4	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	Soil	M22-My0072179		X	X	X
5	SX_OB_20220528_16_13_SS_Primary_EUF	May 28, 2022	4:13PM	Soil	M22-My0072180		X	X	X
6	SX_OB_20220528_16_14_SS_Duplicate_EUF	May 28, 2022	4:14PM	Soil	M22-My0072181		X	X	X
7	SX_OB_20220528_16_47_SR_Rinsate_EU	May 28, 2022	4:47PM	Water	M22-My0072182			X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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								
8	SX_OB_20220528_16_47_S B_Blank_EUF	May 28, 2022	4:47PM	Water	M22-My0072183			X	
9	SX_OB_20220528_20_00_S S_Primary_EUF	May 28, 2022	8:00PM	Soil	M22-My0072184		X	X	X
10	SX_OB_20220529_03_55_S S_Primary_EUF	May 29, 2022	3:55AM	Soil	M22-My0072185		X	X	X
11	SX_OB_20220529_08_00_S	May 29, 2022	8:00AM	Soil	M22-My0072186		X	X	X

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

Project Name: 20220530043455-Eurofin-52
Project ID: JC0927

Order No.:
Report #: 892967
Phone: 08 8338 1009
Fax:

Received: May 30, 2022 4:45 PM
Due: Jun 6, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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								
12	SX_OB_20220 529_08_09_S S_Primary_EU F	May 29, 2022	8:09AM	Soil	M22- My0072187		X	X	X
13	SX_OB_20220 529_12_13_S S_Primary_EU F	May 29, 2022	12:13PM	Soil	M22- My0072188		X	X	X
14	SX_OB_20220 529_16_06_S S_Primary_EU F	May 29, 2022	4:06PM	Soil	M22- My0072189		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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									
15	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	Soil	M22-My0072190		X	X	X
16	SX_OB_20220529_20_02_S_S_Primary_EUF	May 29, 2022	8:02PM	Soil	M22-My0072191		X	X	X
17	SX_OB_20220530_00_06_S_S_Primary_EUF	May 30, 2022	12:06AM	Soil	M22-My0072192		X	X	X
18	SX_OB_20220530_04_00_S	May 30, 2022	4:00AM	Soil	M22-My0072193		X	X	X

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

Project Name: 20220530043455-Eurofin-52
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Received: May 30, 2022 4:45 PM
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Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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								
19	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - pH 5.0	M22- My0072194	X		X	
20	SX_OB_20220 528_08_21_S S_Primary_EU F	May 28, 2022	8:21AM	AUS Leachate - pH 5.0	M22- My0072195	X		X	
21	SX_OB_20220 528_12_06_S S_Primary_EU F	May 28, 2022	12:06PM	AUS Leachate - pH 5.0	M22- My0072196	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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									
22	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - pH 5.0	M22-My0072197	X		X	
23	SX_OB_20220528_16_13_S_Primary_EUF	May 28, 2022	4:13PM	AUS Leachate - pH 5.0	M22-My0072198	X		X	
24	SX_OB_20220528_16_14_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - pH 5.0	M22-My0072199	X		X	
25	SX_OB_20220528_20_00_S_Primary_EU	May 28, 2022	8:00PM	AUS Leachate - pH 5.0	M22-My0072200	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220529_03_55_S_S_Primary_EU_F	May 29, 2022	3:55AM	AUS Leachate - pH 5.0	M22-My0072201	X		X	
27	SX_OB_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - pH 5.0	M22-My0072202	X		X	
28	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0072203	X		X	
29	SX_OB_20220	May 29, 2022	12:13PM	AUS Leachate	M22-	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - pH 5.0	M22-My0072204				
30	SX_OB_20220529_16_06_S_S_Primary_EU_F	May 29, 2022	4:06PM	AUS Leachate - pH 5.0	M22-My0072205	X		X	
31	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0072206	X		X	
32	SX_OB_20220529_20_02_S	May 29, 2022	8:02PM	AUS Leachate - pH 5.0	M22-My0072207	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - pH 5.0	M22- My0072208	X		X	
34	SX_OB_20220 530_04_00_S S_Primary_EU F	May 30, 2022	4:00AM	AUS Leachate - pH 5.0	M22- My0072209	X		X	
35	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - Reagent Water	M22- My0072210	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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									
36	SX_OB_20220528_08_21_S_S_Primary_EU_F	May 28, 2022	8:21AM	AUS Leachate - Reagent Water	M22-My0072211	X		X	
37	SX_OB_20220528_12_06_S_S_Primary_EU_F	May 28, 2022	12:06PM	AUS Leachate - Reagent Water	M22-My0072212	X		X	
38	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - Reagent Water	M22-My0072213	X		X	
39	SX_OB_20220528_16_13_S_S_Primary_EU	May 28, 2022	4:13PM	AUS Leachate - Reagent Water	M22-My0072214	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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								
40	SX_OB_20220528_16_14_S_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - Reagent Water	M22-My0072215	X		X	
41	SX_OB_20220528_20_00_S_S_Primary_EUF	May 28, 2022	8:00PM	AUS Leachate - Reagent Water	M22-My0072216	X		X	
42	SX_OB_20220529_03_55_S_S_Primary_EUF	May 29, 2022	3:55AM	AUS Leachate - Reagent Water	M22-My0072217	X		X	
43	SX_OB_20220529_08_00AM	May 29, 2022	8:00AM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - Reagent Water	M22-My0072218				
44	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - Reagent Water	M22-My0072219	X		X	
45	SX_OB_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - Reagent Water	M22-My0072220	X		X	
46	SX_OB_20220529_16_06_S	May 29, 2022	4:06PM	AUS Leachate - Reagent	M22-My0072221	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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			Water					
47	SX_OB_20220 529_16_08_S S_Duplicate_E UF	May 29, 2022	4:08PM	AUS Leachate - Reagent Water	M22- My0072222	X		X	
48	SX_OB_20220 529_20_02_S S_Primary_EU F	May 29, 2022	8:02PM	AUS Leachate - Reagent Water	M22- My0072223	X		X	
49	SX_OB_20220 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - Reagent Water	M22- My0072224	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220530_04_00_SS_Primary_EU_F	May 30, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0072225	X		X	
Test Counts						32	16	50	16

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)	%	108		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	78		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	82		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	77		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	93		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	77		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	80		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	102		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	91		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	88		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	88		50-150	Pass	

Test		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)		%	56			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)		%	59			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)		%	51			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)		%	130			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)		%	105			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)		%	92			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)		%	65			50-150	Pass		
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA)									
Perfluorobutanesulfonic acid (PFBS)		%	69			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)		%	83			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)		%	67			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)		%	81			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)		%	90			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)		%	88			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)		%	84			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)		%	68			50-150	Pass		
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)		%	90			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)		%	102			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)		%	123			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)		%	72			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-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances									
				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0072214	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-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0072214	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-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0072214	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-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0072214	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0072214	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0072214	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:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS
Mary Makarios	Senior Analyst-Sample Properties



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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Attention: **David Lawson**

Report **892967-S**
Project name **20220530043455-Eurofin-52**
Project ID **JC0927**
Received Date **May 30, 2022**

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	70	93	80	73
Toluene-d8 (surr.)	1	%	65	77	63	114
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 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	85	107	105	105
p-Terphenyl-d14 (surr.)	1	%	142	103	136	137
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	%	123	132	57	63
Tetrachloro-m-xylene (surr.)	1	%	127	107	119	121

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	123	132	57	63
Tetrachloro-m-xylene (surr.)	1	%	127	107	119	121
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	%	143	140	137	110
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	200	< 100	2600	120
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.6	7.5	7.9	7.8
% Moisture						
% Moisture	1	%	34	28	31	25
Heavy Metals						
Arsenic	2	mg/kg	63	47	34	68
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	130	76	69	160
Copper	5	mg/kg	61	51	43	69
Lead	5	mg/kg	6.4	5.8	5.2	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	150	120	110	210
Selenium	5	mg/kg	< 5	< 5	< 5	< 5
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	100	86	87	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	%	117	99	109	116
13C5-PFPeA (surr.)	1	%	125	111	121	119
13C5-PFHxA (surr.)	1	%	125	112	133	122
13C4-PFHpA (surr.)	1	%	116	108	132	123
13C8-PFOA (surr.)	1	%	134	114	123	138
13C5-PFNA (surr.)	1	%	135	122	134	130
13C6-PFDA (surr.)	1	%	132	112	138	132
13C2-PFUnDA (surr.)	1	%	139	114	128	137
13C2-PFDoDA (surr.)	1	%	135	112	127	132
13C2-PFTeDA (surr.)	1	%	111	82	103	97
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	%	75	129	138	73
D3-N-MeFOSA (surr.)	1	%	78	126	141	75
D5-N-EtFOSA (surr.)	1	%	87	144	77	79
D7-N-MeFOSE (surr.)	1	%	136	106	124	124
D9-N-EtFOSE (surr.)	1	%	144	118	126	127
D5-N-EtFOSAA (surr.)	1	%	77	132	143	140
D3-N-MeFOSAA (surr.)	1	%	139	113	138	123

Client Sample ID			SX_OB_20220 528_08_14_SS _TriPLICATE_EU F	SX_OB_20220 528_08_21_SS _Primary_EUF	SX_OB_20220 528_12_06_SS _Primary_EUF	SX_IB_202205 28_12_21_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072176	M22- My0072177	M22- My0072178	M22- My0072179
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 28, 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	%	126	119	136	130
18O2-PFHxS (surr.)	1	%	122	106	116	116
13C8-PFOS (surr.)	1	%	137	115	140	139
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	%	129	114	112	122
13C2-6:2 FTSA (surr.)	1	%	125	100	115	123
13C2-8:2 FTSA (surr.)	1	%	94	112	126	130
13C2-10:2 FTSA (surr.)	1	%	139	123	133	142
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 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Volatile 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	%	70	61	80	127
Toluene-d8 (surr.)	1	%	109	98	60	129
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	%	113	115	127	123
p-Terphenyl-d14 (surr.)	1	%	107	149	102	129

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	%	73	68	145	62
Tetrachloro-m-xylene (surr.)	1	%	134	145	52	130
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	%	73	68	145	62
Tetrachloro-m-xylene (surr.)	1	%	134	145	52	130
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- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 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	%	139	140	129	143
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	150	140	200	180
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	8.2	7.7	7.8
% Moisture						
% Moisture	1	%	30	30	34	28
Heavy Metals						
Arsenic	2	mg/kg	48	56	65	41
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	99	100	130	81
Copper	5	mg/kg	48	50	56	41
Lead	5	mg/kg	6.9	7.3	5.2	6.6
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	120	130	140	110
Selenium	5	mg/kg	< 5	< 5	< 5	< 5
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	88	87	120	80
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	122	120	100	97
13C5-PFPeA (surr.)	1	%	124	130	107	102
13C5-PFHxA (surr.)	1	%	135	125	107	105

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	130	128	105	101
13C8-PFOA (surr.)	1	%	128	137	114	114
13C5-PFNA (surr.)	1	%	135	130	124	119
13C6-PFDA (surr.)	1	%	138	134	118	105
13C2-PFUnDA (surr.)	1	%	130	134	111	117
13C2-PFDoDA (surr.)	1	%	132	132	120	109
13C2-PFTeDA (surr.)	1	%	106	105	113	84
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	%	77	76	129	119
D3-N-MeFOSA (surr.)	1	%	67	70	127	124
D5-N-EtFOSA (surr.)	1	%	80	80	142	139
D7-N-MeFOSE (surr.)	1	%	127	128	110	108
D9-N-EtFOSE (surr.)	1	%	138	134	115	119
D5-N-EtFOSAA (surr.)	1	%	76	148	124	125
D3-N-MeFOSAA (surr.)	1	%	141	131	116	113
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	%	135	137	117	117
18O2-PFHxS (surr.)	1	%	125	121	106	102
13C8-PFOS (surr.)	1	%	138	147	119	117
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	%	135	132	115	104
13C2-6:2 FTSA (surr.)	1	%	115	122	112	110

Client Sample ID			SX_OB_20220 528_16_13_SS _Primary_EUF	SX_OB_20220 528_16_14_SS _Duplicate_EU F	SX_OB_20220 528_20_00_SS _Primary_EUF	SX_OB_20220 529_03_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072180	M22- My0072181	M22- My0072184	M22- My0072185
Date Sampled			May 28, 2022	May 28, 2022	May 28, 2022	May 29, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	128	121	102	91
13C2-10:2 FTSA (surr.)	1	%	79	148	124	109
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 529_08_00_SS _Primary_EUF	SX_OB_20220 529_08_09_SS _Primary_EUF	SX_OB_20220 529_12_13_SS _Primary_EUF	SX_OB_20220 529_16_06_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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-Dichloroethane	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

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
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	%	89	78	84	58
Toluene-d8 (surr.)	1	%	68	59	132	92

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 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	%	134	102	124	101
p-Terphenyl-d14 (surr.)	1	%	149	139	114	115
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

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	114	83	109	96
Tetrachloro-m-xylene (surr.)	1	%	120	148	117	120
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	%	114	83	109	96
Tetrachloro-m-xylene (surr.)	1	%	120	148	117	120
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	110	132	109	137
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Other Parameters						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	220	140	150	150
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.0	7.6	7.7	7.5
% Moisture	1	%	23	31	28	34

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	93	55	68	59
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	120	94	90	110
Copper	5	mg/kg	71	44	49	40
Lead	5	mg/kg	9.8	7.4	7.3	8.6
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	120	100	130	100
Selenium	5	mg/kg	< 5	< 5	< 5	< 5
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	84	72	92	68
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 (PFTeDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	94	106	133	110
13C5-PFPeA (surr.)	1	%	97	109	144	112
13C5-PFHxA (surr.)	1	%	108	108	146	111
13C4-PFHpA (surr.)	1	%	105	106	139	110
13C8-PFOA (surr.)	1	%	106	119	146	125
13C5-PFNA (surr.)	1	%	110	120	103	116
13C6-PFDA (surr.)	1	%	105	118	80	121
13C2-PFUnDA (surr.)	1	%	113	116	101	132
13C2-PFDoDA (surr.)	1	%	107	109	144	120
13C2-PFTeDA (surr.)	1	%	114	76	115	89
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	%	117	128	84	68
D3-N-MeFOSA (surr.)	1	%	117	115	81	69

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072186	M22- My0072187	M22- My0072188	M22- My0072189
Date Sampled			May 29, 2022	May 29, 2022	May 29, 2022	May 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	132	136	90	69
D7-N-MeFOSE (surr.)	1	%	104	111	147	116
D9-N-EtFOSE (surr.)	1	%	108	118	147	119
D5-N-EtFOSAA (surr.)	1	%	129	124	81	133
D3-N-MeFOSAA (surr.)	1	%	109	125	149	121
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	%	111	122	148	128
18O2-PFHxS (surr.)	1	%	97	99	142	112
13C8-PFOS (surr.)	1	%	106	119	76	125
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	%	104	111	138	118
13C2-6:2 FTSA (surr.)	1	%	104	115	140	110
13C2-8:2 FTSA (surr.)	1	%	84	90	83	110
13C2-10:2 FTSA (surr.)	1	%	97	120	83	137
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 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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
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_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	< 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	%	80	66	71	72
Toluene-d8 (surr.)	1	%	62	100	113	70
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

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	122	123	117	64
p-Terphenyl-d14 (surr.)	1	%	135	145	145	89
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
Dibutylchloredate (surr.)	1	%	115	150	66	104
Tetrachloro-m-xylene (surr.)	1	%	110	136	100	141
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
Dibutylchloredate (surr.)	1	%	115	150	66	104
Tetrachloro-m-xylene (surr.)	1	%	110	136	100	141

Client Sample ID			SX_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 2022
Test/Reference	LOR	Unit				
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	%	85	147	71	44
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	240	120	180	190
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.7	7.5	7.4	8.1
% Moisture						
% Moisture	1	%	33	30	32	30
Heavy Metals						
Arsenic	2	mg/kg	62	59	57	50
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	97	110	110	98
Copper	5	mg/kg	38	59	36	40
Lead	5	mg/kg	8.1	6.4	9.1	8.1
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	99	150	73	110
Selenium	5	mg/kg	< 5	< 5	< 5	< 5
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	65	99	48	78
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

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
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	%	109	110	116	95
13C5-PFPeA (surr.)	1	%	120	115	119	101
13C5-PFHxA (surr.)	1	%	119	113	124	104
13C4-PFHpA (surr.)	1	%	116	116	125	101
13C8-PFOA (surr.)	1	%	122	127	139	105
13C5-PFNA (surr.)	1	%	132	128	144	116
13C6-PFDA (surr.)	1	%	123	132	146	120
13C2-PFUnDA (surr.)	1	%	129	128	135	110
13C2-PFDoDA (surr.)	1	%	122	123	132	109
13C2-PFTeDA (surr.)	1	%	100	94	99	59
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	%	144	69	75	112
D3-N-MeFOSA (surr.)	1	%	141	70	77	104
D5-N-EtFOSA (surr.)	1	%	147	80	83	113
D7-N-MeFOSE (surr.)	1	%	125	127	128	86
D9-N-EtFOSE (surr.)	1	%	127	129	130	91
D5-N-EtFOSAA (surr.)	1	%	135	126	78	103
D3-N-MeFOSAA (surr.)	1	%	125	127	149	101
Perfluoroalkyl sulfonic acids (PFsAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoronananesulfonic 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	%	130	123	119	108
18O2-PFHxS (surr.)	1	%	119	115	120	88
13C8-PFOS (surr.)	1	%	131	135	144	99

Client Sample ID			SX_OB_20220 529_16_08_SS Duplicate_EU F	SX_OB_20220 529_20_02_SS Primary_EUF	SX_OB_20220 530_00_06_SS Primary_EUF	SX_OB_20220 530_04_00_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0072190	M22- My0072191	M22- My0072192	M22- My0072193
Date Sampled			May 29, 2022	May 29, 2022	May 30, 2022	May 30, 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	%	119	115	131	86
13C2-6:2 FTSA (surr.)	1	%	122	121	119	89
13C2-8:2 FTSA (surr.)	1	%	127	113	138	131
13C2-10:2 FTSA (surr.)	1	%	138	132	141	116
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 31, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 31, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 31, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	May 31, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	May 31, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 31, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	May 31, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	May 31, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 31, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 31, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	May 31, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	May 31, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC	Melbourne	Jun 01, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	May 31, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	May 31, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	May 30, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 31, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 30, 2022	

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

Project Name: 20220530043455-Eurofin-52
Project ID: JC0927

Order No.:
Report #: 892967
Phone: 08 8338 1009
Fax:

Received: May 30, 2022 4:45 PM
Due: Jun 6, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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_20220528_08_14_S_S_Triplicate_EUF	May 28, 2022	8:14AM	Soil	M22-My0072176		X	X	X
2	SX_OB_20220528_08_21_S_S_Primary_EUF	May 28, 2022	8:21AM	Soil	M22-My0072177		X	X	X
3	SX_OB_20220528_12_06_S_S_Primary_EUF	May 28, 2022	12:06PM	Soil	M22-My0072178		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_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	Soil	M22-My0072179		X	X	X
5	SX_OB_20220528_16_13_SS_Primary_EUF	May 28, 2022	4:13PM	Soil	M22-My0072180		X	X	X
6	SX_OB_20220528_16_14_SS_Duplicate_EUF	May 28, 2022	4:14PM	Soil	M22-My0072181		X	X	X
7	SX_OB_20220528_16_47_SR_Rinsate_EU	May 28, 2022	4:47PM	Water	M22-My0072182			X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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								
8	SX_OB_20220528_16_47_S B_Blank_EUF	May 28, 2022	4:47PM	Water	M22-My0072183			X	
9	SX_OB_20220528_20_00_S S_Primary_EUF	May 28, 2022	8:00PM	Soil	M22-My0072184		X	X	X
10	SX_OB_20220529_03_55_S S_Primary_EUF	May 29, 2022	3:55AM	Soil	M22-My0072185		X	X	X
11	SX_OB_20220529_08_00_S	May 29, 2022	8:00AM	Soil	M22-My0072186		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									
	S_Primary_EU F								
12	SX_OB_20220 529_08_09_S S_Primary_EU F	May 29, 2022	8:09AM	Soil	M22- My0072187		X	X	X
13	SX_OB_20220 529_12_13_S S_Primary_EU F	May 29, 2022	12:13PM	Soil	M22- My0072188		X	X	X
14	SX_OB_20220 529_16_06_S S_Primary_EU F	May 29, 2022	4:06PM	Soil	M22- My0072189		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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									
15	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	Soil	M22-My0072190		X	X	X
16	SX_OB_20220529_20_02_S_S_Primary_EUF	May 29, 2022	8:02PM	Soil	M22-My0072191		X	X	X
17	SX_OB_20220530_00_06_S_S_Primary_EUF	May 30, 2022	12:06AM	Soil	M22-My0072192		X	X	X
18	SX_OB_20220530_04_00_S	May 30, 2022	4:00AM	Soil	M22-My0072193		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									
	S_Primary_EU F								
19	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - pH 5.0	M22- My0072194	X		X	
20	SX_OB_20220 528_08_21_S S_Primary_EU F	May 28, 2022	8:21AM	AUS Leachate - pH 5.0	M22- My0072195	X		X	
21	SX_OB_20220 528_12_06_S S_Primary_EU F	May 28, 2022	12:06PM	AUS Leachate - pH 5.0	M22- My0072196	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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									
22	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - pH 5.0	M22-My0072197	X		X	
23	SX_OB_20220528_16_13_S_Primary_EUF	May 28, 2022	4:13PM	AUS Leachate - pH 5.0	M22-My0072198	X		X	
24	SX_OB_20220528_16_14_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - pH 5.0	M22-My0072199	X		X	
25	SX_OB_20220528_20_00_S_Primary_EU	May 28, 2022	8:00PM	AUS Leachate - pH 5.0	M22-My0072200	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									
	F								
26	SX_OB_20220529_03_55_S_S_Primary_EU_F	May 29, 2022	3:55AM	AUS Leachate - pH 5.0	M22-My0072201	X		X	
27	SX_OB_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - pH 5.0	M22-My0072202	X		X	
28	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0072203	X		X	
29	SX_OB_20220	May 29, 2022	12:13PM	AUS Leachate	M22-	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

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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_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - pH 5.0	M22-My0072204				
30	SX_OB_20220529_16_06_S_S_Primary_EU_F	May 29, 2022	4:06PM	AUS Leachate - pH 5.0	M22-My0072205	X		X	
31	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0072206	X		X	
32	SX_OB_20220529_20_02_S	May 29, 2022	8:02PM	AUS Leachate - pH 5.0	M22-My0072207	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - pH 5.0	M22- My0072208	X		X	
34	SX_OB_20220 530_04_00_S S_Primary_EU F	May 30, 2022	4:00AM	AUS Leachate - pH 5.0	M22- My0072209	X		X	
35	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - Reagent Water	M22- My0072210	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

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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									
36	SX_OB_20220528_08_21_S_S_Primary_EU_F	May 28, 2022	8:21AM	AUS Leachate - Reagent Water	M22-My0072211	X		X	
37	SX_OB_20220528_12_06_S_S_Primary_EU_F	May 28, 2022	12:06PM	AUS Leachate - Reagent Water	M22-My0072212	X		X	
38	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - Reagent Water	M22-My0072213	X		X	
39	SX_OB_20220528_16_13_S_S_Primary_EU	May 28, 2022	4:13PM	AUS Leachate - Reagent Water	M22-My0072214	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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								
40	SX_OB_20220528_16_14_S_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - Reagent Water	M22-My0072215	X		X	
41	SX_OB_20220528_20_00_S_S_Primary_EUF	May 28, 2022	8:00PM	AUS Leachate - Reagent Water	M22-My0072216	X		X	
42	SX_OB_20220529_03_55_S_S_Primary_EUF	May 29, 2022	3:55AM	AUS Leachate - Reagent Water	M22-My0072217	X		X	
43	SX_OB_20220529_08_00_S_S_Primary_EUF	May 29, 2022	8:00AM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 Day
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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									
43	SX_OB_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - Reagent Water	M22-My0072218				
44	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - Reagent Water	M22-My0072219	X		X	
45	SX_OB_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - Reagent Water	M22-My0072220	X		X	
46	SX_OB_20220529_16_06_S	May 29, 2022	4:06PM	AUS Leachate - Reagent	M22-My0072221	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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			Water					
47	SX_OB_20220 529_16_08_S S_Duplicate_E UF	May 29, 2022	4:08PM	AUS Leachate - Reagent Water	M22- My0072222	X		X	
48	SX_OB_20220 529_20_02_S S_Primary_EU F	May 29, 2022	8:02PM	AUS Leachate - Reagent Water	M22- My0072223	X		X	
49	SX_OB_20220 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - Reagent Water	M22- My0072224	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220530_04_00_SS_Primary_EUF	May 30, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0072225	X		X	
Test Counts						32	16	50	16

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							
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	< 1			1	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	< 5			5	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	%	112		70-130	Pass	
TRH C10-C14	%	103		70-130	Pass	
Naphthalene	%	99		70-130	Pass	
TRH C6-C10	%	113		70-130	Pass	
TRH >C10-C16	%	105		70-130	Pass	
LCS - % Recovery						
Volatile Organics						
1.1-Dichloroethene	%	109		70-130	Pass	
1.1.1-Trichloroethane	%	89		70-130	Pass	
1.2-Dichlorobenzene	%	97		70-130	Pass	
1.2-Dichloroethane	%	116		70-130	Pass	
Benzene	%	103		70-130	Pass	
Ethylbenzene	%	106		70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	99			70-130	Pass	
Toluene	%	96			70-130	Pass	
Trichloroethene	%	109			70-130	Pass	
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	109			70-130	Pass	
Acenaphthylene	%	116			70-130	Pass	
Anthracene	%	106			70-130	Pass	
Benz(a)anthracene	%	109			70-130	Pass	
Benzo(a)pyrene	%	81			70-130	Pass	
Benzo(b&i)fluoranthene	%	95			70-130	Pass	
Benzo(g,h,i)perylene	%	96			70-130	Pass	
Benzo(k)fluoranthene	%	77			70-130	Pass	
Chrysene	%	78			70-130	Pass	
Dibenz(a,h)anthracene	%	77			70-130	Pass	
Fluoranthene	%	82			70-130	Pass	
Fluorene	%	123			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	104			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
Phenanthrene	%	93			70-130	Pass	
Pyrene	%	99			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	105			70-130	Pass	
4,4'-DDD	%	98			70-130	Pass	
4,4'-DDE	%	103			70-130	Pass	
4,4'-DDT	%	89			70-130	Pass	
a-HCH	%	112			70-130	Pass	
Aldrin	%	107			70-130	Pass	
b-HCH	%	108			70-130	Pass	
d-HCH	%	110			70-130	Pass	
Dieldrin	%	111			70-130	Pass	
Endosulfan I	%	98			70-130	Pass	
Endosulfan II	%	105			70-130	Pass	
Endosulfan sulphate	%	94			70-130	Pass	
Endrin	%	90			70-130	Pass	
Endrin aldehyde	%	110			70-130	Pass	
Endrin ketone	%	124			70-130	Pass	
g-HCH (Lindane)	%	119			70-130	Pass	
Heptachlor	%	98			70-130	Pass	
Heptachlor epoxide	%	112			70-130	Pass	
Hexachlorobenzene	%	122			70-130	Pass	
Methoxychlor	%	105			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	73			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	91			25-140	Pass	
2,4-Dichlorophenol	%	110			25-140	Pass	
2,4,5-Trichlorophenol	%	51			25-140	Pass	
2,4,6-Trichlorophenol	%	53			25-140	Pass	
2,6-Dichlorophenol	%	79			25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	84		25-140	Pass	
Pentachlorophenol	%	40		25-140	Pass	
Tetrachlorophenols - Total	%	32		25-140	Pass	
LCS - % Recovery						
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	%	34		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	30		25-140	Pass	
2-Nitrophenol	%	86		25-140	Pass	
2,4-Dimethylphenol	%	88		25-140	Pass	
2,4-Dinitrophenol	%	53		25-140	Pass	
2-Methylphenol (o-Cresol)	%	95		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	116		25-140	Pass	
4-Nitrophenol	%	42		25-140	Pass	
Dinoseb	%	43		25-140	Pass	
Phenol	%	91		25-140	Pass	
LCS - % Recovery						
Chromium (hexavalent)	%	91		70-130	Pass	
Cyanide (total)	%	112		70-130	Pass	
Fluoride (Total)	%	87		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	108		80-120	Pass	
Cadmium	%	106		80-120	Pass	
Chromium	%	109		80-120	Pass	
Copper	%	106		80-120	Pass	
Lead	%	110		80-120	Pass	
Mercury	%	102		80-120	Pass	
Molybdenum	%	107		80-120	Pass	
Nickel	%	102		80-120	Pass	
Selenium	%	109		80-120	Pass	
Silver	%	107		80-120	Pass	
Tin	%	103		80-120	Pass	
Zinc	%	110		80-120	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	112		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	100		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	101		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	107		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	107		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	107		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	108		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	111		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	117		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	116		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	105		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	%	101		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	105		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	109		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	114		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	114		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	102		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	109			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)								
Perfluorobutanesulfonic acid (PFBS)	%	108			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	109			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	105			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	106			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	97			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	86			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	106			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	116			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	96			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	142			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	101			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-My0069148	NCP	%	125		70-130	Pass	
TRH >C10-C16	M22-My0069148	NCP	%	128		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-My0072292	NCP	%	109		70-130	Pass	
Acenaphthylene	M22-My0072292	NCP	%	88		70-130	Pass	
Anthracene	M22-My0072292	NCP	%	109		70-130	Pass	
Benz(a)anthracene	M22-My0072292	NCP	%	91		70-130	Pass	
Benzo(a)pyrene	M22-My0072292	NCP	%	105		70-130	Pass	
Benzo(b&i)fluoranthene	M22-My0072292	NCP	%	90		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0072292	NCP	%	86		70-130	Pass	
Benzo(k)fluoranthene	M22-My0072292	NCP	%	109		70-130	Pass	
Chrysene	M22-My0072292	NCP	%	105		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0072292	NCP	%	109		70-130	Pass	
Fluoranthene	M22-My0072292	NCP	%	102		70-130	Pass	
Fluorene	M22-My0072292	NCP	%	105		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-My0072292	NCP	%	103		70-130	Pass	
Naphthalene	M22-My0072292	NCP	%	108		70-130	Pass	
Phenanthrene	M22-My0072292	NCP	%	103		70-130	Pass	
Pyrene	M22-My0072292	NCP	%	112		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-My0072292	NCP	%	94		30-130	Pass	
2,4-Dichlorophenol	M22-My0072292	NCP	%	108		30-130	Pass	
2,4,5-Trichlorophenol	M22-My0072292	NCP	%	69		30-130	Pass	
2,4,6-Trichlorophenol	M22-My0072292	NCP	%	73		30-130	Pass	
2,6-Dichlorophenol	M22-My0072292	NCP	%	81		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0072292	NCP	%	83		30-130	Pass	
Pentachlorophenol	M22-My0072292	NCP	%	52		30-130	Pass	
Tetrachlorophenols - Total	M22-My0072292	NCP	%	87		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-My0072292	NCP	%	98		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-My0072292	NCP	%	50		30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
2-Nitrophenol	M22-My0072292	NCP	%	80		30-130	Pass	
2,4-Dimethylphenol	M22-My0072292	NCP	%	99		30-130	Pass	
2,4-Dinitrophenol	M22-My0072292	NCP	%	43		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-My0072292	NCP	%	100		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0072292	NCP	%	123		30-130	Pass	
4-Nitrophenol	M22-My0072292	NCP	%	70		30-130	Pass	
Dinoseb	M22-My0072292	NCP	%	71		30-130	Pass	
Phenol	M22-My0072292	NCP	%	111		30-130	Pass	
Spike - % Recovery								
				Result 1				
Cyanide (total)	M22-My0069347	NCP	%	96		70-130	Pass	
Fluoride (Total)	M22-Jn0000484	NCP	%	72		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-My0070949	NCP	%	103		75-125	Pass	
Cadmium	M22-My0070949	NCP	%	90		75-125	Pass	
Chromium	M22-My0072726	NCP	%	117		75-125	Pass	
Copper	M22-My0070949	NCP	%	110		75-125	Pass	
Lead	M22-My0070949	NCP	%	125		75-125	Pass	
Mercury	M22-My0072726	NCP	%	109		75-125	Pass	
Molybdenum	M22-My0070949	NCP	%	111		75-125	Pass	
Nickel	M22-My0070949	NCP	%	106		75-125	Pass	
Selenium	M22-My0070949	NCP	%	103		75-125	Pass	
Silver	M22-My0070949	NCP	%	89		75-125	Pass	
Tin	M22-My0070949	NCP	%	106		75-125	Pass	
Zinc	M22-My0070949	NCP	%	106		75-125	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-My0069346	NCP	%	114		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0069346	NCP	%	103		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0069346	NCP	%	114		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0069346	NCP	%	100		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0069346	NCP	%	112		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0069346	NCP	%	107		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0069346	NCP	%	110		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0069346	NCP	%	108		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0069346	NCP	%	110		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-My0069346	NCP	%	116		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0069346	NCP	%	111		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-My0069346	NCP	%	103		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0069346	NCP	%	103		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0069346	NCP	%	107		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0069346	NCP	%	111		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0069346	NCP	%	123		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-My0069346	NCP	%	108		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0069346	NCP	%	116		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-My0069346	NCP	%	112		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0069346	NCP	%	104		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0069346	NCP	%	110		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0069346	NCP	%	108		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0069346	NCP	%	110		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0069346	NCP	%	105		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0069346	NCP	%	99		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0069346	NCP	%	111		50-150	Pass	
Spike - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0069346	NCP	%	127		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0069346	NCP	%	100		50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0069346	NCP	%	136		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0069346	NCP	%	100		50-150	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C6-C9	M22-My0072188	CP	%	98		70-130	Pass	
Naphthalene	M22-My0072188	CP	%	84		70-130	Pass	
TRH C6-C10	M22-My0072188	CP	%	97		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
1.1-Dichloroethene	M22-My0072188	CP	%	123		70-130	Pass	
1.1.1-Trichloroethane	M22-My0072188	CP	%	82		70-130	Pass	
1.2-Dichlorobenzene	M22-My0072188	CP	%	83		70-130	Pass	
1.2-Dichloroethane	M22-My0072188	CP	%	113		70-130	Pass	
Benzene	M22-My0072188	CP	%	99		70-130	Pass	
Ethylbenzene	M22-My0072188	CP	%	88		70-130	Pass	
m&p-Xylenes	M22-My0072188	CP	%	83		70-130	Pass	
o-Xylene	M22-My0072188	CP	%	92		70-130	Pass	
Toluene	M22-My0072188	CP	%	89		70-130	Pass	
Trichloroethene	M22-My0072188	CP	%	101		70-130	Pass	
Xylenes - Total*	M22-My0072188	CP	%	86		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	M22-My0072188	CP	%	102		70-130	Pass	
4.4'-DDD	M22-My0072188	CP	%	128		70-130	Pass	
4.4'-DDE	M22-My0072188	CP	%	97		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDT	M22-My0072188	CP	%	95			70-130	Pass	
a-HCH	M22-My0072188	CP	%	78			70-130	Pass	
Aldrin	M22-My0072188	CP	%	88			70-130	Pass	
b-HCH	M22-My0072188	CP	%	104			70-130	Pass	
d-HCH	M22-My0072188	CP	%	78			70-130	Pass	
Dieldrin	M22-My0072188	CP	%	88			70-130	Pass	
Endosulfan I	M22-My0072188	CP	%	119			70-130	Pass	
Endosulfan II	M22-My0072188	CP	%	84			70-130	Pass	
Endosulfan sulphate	M22-My0072188	CP	%	98			70-130	Pass	
Endrin	M22-My0072188	CP	%	85			70-130	Pass	
Endrin aldehyde	M22-My0072188	CP	%	110			70-130	Pass	
Endrin ketone	M22-My0072188	CP	%	119			70-130	Pass	
g-HCH (Lindane)	M22-My0072188	CP	%	87			70-130	Pass	
Heptachlor	M22-My0072188	CP	%	73			70-130	Pass	
Heptachlor epoxide	M22-My0072188	CP	%	81			70-130	Pass	
Hexachlorobenzene	M22-My0072188	CP	%	95			70-130	Pass	
Methoxychlor	M22-My0072188	CP	%	110			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-My0072890	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-My0072890	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-My0072890	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-My0072890	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-My0072890	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-My0072890	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Dieldrin	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0064182	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0064182	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-My0064182	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-My0064182	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0064182	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0064182	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0064182	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-My0064182	NCP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-My0064182	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0064182	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-My0064182	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0064182	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0064182	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0064182	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0064182	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0064182	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Cyanide (total)	M22-My0068854	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Fluoride (Total)	S22-My0069345	NCP	mg/kg	< 100	< 100	<1	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M22-My0067546	NCP	pH Units	9.0	9.1	pass	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-My0071045	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	M22-My0071045	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M22-My0071045	NCP	mg/kg	19	19	<1	30%	Pass
Copper	M22-My0071045	NCP	mg/kg	9.9	10	3.0	30%	Pass
Lead	M22-My0071045	NCP	mg/kg	140	150	3.0	30%	Pass
Mercury	M22-My0071045	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0071045	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0071045	NCP	mg/kg	8.5	8.6	2.0	30%	Pass
Selenium	M22-My0071045	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M22-My0071045	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0071045	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0071045	NCP	mg/kg	37	38	2.0	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0068939	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0068939	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0068939	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0068939	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M22-My0072177	CP	mg/kg	< 20	< 20	<1	30%	Pass
Naphthalene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M22-My0072177	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Hexachlorobutadiene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1-Dichloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trichlorobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1-Dichloroethene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1-Trichloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1.2-Tetrachloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2-Trichloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2.2-Tetrachloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dibromoethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichlorobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloropropane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.3-Trichloropropane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trimethylbenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichlorobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichloropropane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3.5-Trimethylbenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-My0072177	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Carbon disulfide	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0072177	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0072177	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0072177	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0072177	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0072177	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0072177	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0072177	CP	%	28	28	3.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0072179	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0072185	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0072188	CP	%	28	26	5.0	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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Michael Cassidy	Analytical Services Manager
Caitlin Breeze	Senior Analyst-Inorganic
Edward Lee	Senior Analyst-Organic
Emily Rosenberg	Senior Analyst-Metal
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-PFAS
Joseph Edouard	Senior Analyst-Volatile
Linda Chouman	Senior Analyst-Sample Properties
Mary Makarios	Senior Analyst-Sample Properties
Scott Beddoes	Senior Analyst-Inorganic
Vivian Wang	Senior Analyst-Volatile



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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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 **892967-W**
Project name **20220530043455-Eurofin-52**
Project ID **JC0927**
Received Date **May 30, 2022**

Client Sample ID			SX_OB_20220 528_16_47_SR _Rinsate_EUF	SX_OB_20220 528_16_47_SB _Blank_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0072182	M22- My0072183
Date Sampled			May 28, 2022	May 28, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	76	66
13C5-PFPeA (surr.)	1	%	87	70
13C5-PFHxA (surr.)	1	%	75	67
13C4-PFHpA (surr.)	1	%	71	58
13C8-PFOA (surr.)	1	%	73	70
13C5-PFNA (surr.)	1	%	69	74
13C6-PFDA (surr.)	1	%	69	83
13C2-PFUnDA (surr.)	1	%	69	100
13C2-PFDoDA (surr.)	1	%	73	119
13C2-PFTeDA (surr.)	1	%	80	112
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	96	38

Client Sample ID			SX_OB_20220 528_16_47_SR _Rinsate_EUF	SX_OB_20220 528_16_47_SB _Blank_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0072182	M22- My0072183
Date Sampled			May 28, 2022	May 28, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D3-N-MeFOSA (surr.)	1	%	113	13
D5-N-EtFOSA (surr.)	1	%	128	14
D7-N-MeFOSE (surr.)	1	%	68	50
D9-N-EtFOSE (surr.)	1	%	78	58
D5-N-EtFOSAA (surr.)	1	%	73	108
D3-N-MeFOSAA (surr.)	1	%	69	95
Perfluoroalkyl sulfonic acids (PFASs)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	76	78
18O2-PFHxS (surr.)	1	%	66	72
13C8-PFOS (surr.)	1	%	84	87
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
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	99	37
13C2-6:2 FTSA (surr.)	1	%	69	38
13C2-8:2 FTSA (surr.)	1	%	132	99
13C2-10:2 FTSA (surr.)	1	%	69	92
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	May 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	May 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	May 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	May 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	May 30, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220528_08_14_S_S_Triplicate_EUF	May 28, 2022	8:14AM	Soil	M22-My0072176		X	X	X
2	SX_OB_20220528_08_21_S_S_Primary_EUF	May 28, 2022	8:21AM	Soil	M22-My0072177		X	X	X
3	SX_OB_20220528_12_06_S_S_Primary_EUF	May 28, 2022	12:06PM	Soil	M22-My0072178		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_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	Soil	M22-My0072179		X	X	X
5	SX_OB_20220528_16_13_SS_Primary_EUF	May 28, 2022	4:13PM	Soil	M22-My0072180		X	X	X
6	SX_OB_20220528_16_14_SS_Duplicate_EUF	May 28, 2022	4:14PM	Soil	M22-My0072181		X	X	X
7	SX_OB_20220528_16_47_SR_Rinsate_EU	May 28, 2022	4:47PM	Water	M22-My0072182			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								
8	SX_OB_20220528_16_47_S B_Blank_EUF	May 28, 2022	4:47PM	Water	M22-My0072183			X	
9	SX_OB_20220528_20_00_S S_Primary_EUF	May 28, 2022	8:00PM	Soil	M22-My0072184		X	X	X
10	SX_OB_20220529_03_55_S S_Primary_EUF	May 29, 2022	3:55AM	Soil	M22-My0072185		X	X	X
11	SX_OB_20220529_08_00_S	May 29, 2022	8:00AM	Soil	M22-My0072186		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									
	S_Primary_EU F								
12	SX_OB_20220 529_08_09_S S_Primary_EU F	May 29, 2022	8:09AM	Soil	M22- My0072187		X	X	X
13	SX_OB_20220 529_12_13_S S_Primary_EU F	May 29, 2022	12:13PM	Soil	M22- My0072188		X	X	X
14	SX_OB_20220 529_16_06_S S_Primary_EU F	May 29, 2022	4:06PM	Soil	M22- My0072189		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									
15	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	Soil	M22-My0072190		X	X	X
16	SX_OB_20220529_20_02_S_S_Primary_EUF	May 29, 2022	8:02PM	Soil	M22-My0072191		X	X	X
17	SX_OB_20220530_00_06_S_S_Primary_EUF	May 30, 2022	12:06AM	Soil	M22-My0072192		X	X	X
18	SX_OB_20220530_04_00_S	May 30, 2022	4:00AM	Soil	M22-My0072193		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									
	S_Primary_EU F								
19	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - pH 5.0	M22- My0072194	X		X	
20	SX_OB_20220 528_08_21_S S_Primary_EU F	May 28, 2022	8:21AM	AUS Leachate - pH 5.0	M22- My0072195	X		X	
21	SX_OB_20220 528_12_06_S S_Primary_EU F	May 28, 2022	12:06PM	AUS Leachate - pH 5.0	M22- My0072196	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_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - pH 5.0	M22-My0072197	X		X	
23	SX_OB_20220528_16_13_S_Primary_EUF	May 28, 2022	4:13PM	AUS Leachate - pH 5.0	M22-My0072198	X		X	
24	SX_OB_20220528_16_14_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - pH 5.0	M22-My0072199	X		X	
25	SX_OB_20220528_20_00_S_Primary_EU	May 28, 2022	8:00PM	AUS Leachate - pH 5.0	M22-My0072200	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								
26	SX_OB_20220529_03_55_S_S_Primary_EU_F	May 29, 2022	3:55AM	AUS Leachate - pH 5.0	M22-My0072201	X		X	
27	SX_OB_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - pH 5.0	M22-My0072202	X		X	
28	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0072203	X		X	
29	SX_OB_20220	May 29, 2022	12:13PM	AUS Leachate	M22-	X		X	

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Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 Day
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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_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - pH 5.0	M22-My0072204				
30	SX_OB_20220529_16_06_S_S_Primary_EU_F	May 29, 2022	4:06PM	AUS Leachate - pH 5.0	M22-My0072205	X		X	
31	SX_OB_20220529_16_08_S_S_Duplicate_EUF	May 29, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0072206	X		X	
32	SX_OB_20220529_20_02_S	May 29, 2022	8:02PM	AUS Leachate - pH 5.0	M22-My0072207	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 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - pH 5.0	M22- My0072208	X		X	
34	SX_OB_20220 530_04_00_S S_Primary_EU F	May 30, 2022	4:00AM	AUS Leachate - pH 5.0	M22- My0072209	X		X	
35	SX_OB_20220 528_08_14_S S_Triplicate_E UF	May 28, 2022	8:14AM	AUS Leachate - Reagent Water	M22- My0072210	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									
36	SX_OB_20220528_08_21_S_S_Primary_EU_F	May 28, 2022	8:21AM	AUS Leachate - Reagent Water	M22-My0072211	X		X	
37	SX_OB_20220528_12_06_S_S_Primary_EU_F	May 28, 2022	12:06PM	AUS Leachate - Reagent Water	M22-My0072212	X		X	
38	SX_IB_20220528_12_21_SS_Primary_EUF	May 28, 2022	12:21PM	AUS Leachate - Reagent Water	M22-My0072213	X		X	
39	SX_OB_20220528_16_13_S_S_Primary_EU	May 28, 2022	4:13PM	AUS Leachate - Reagent Water	M22-My0072214	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								
40	SX_OB_20220528_16_14_S_S_Duplicate_EUF	May 28, 2022	4:14PM	AUS Leachate - Reagent Water	M22-My0072215	X		X	
41	SX_OB_20220528_20_00_S_S_Primary_EUF	May 28, 2022	8:00PM	AUS Leachate - Reagent Water	M22-My0072216	X		X	
42	SX_OB_20220529_03_55_S_S_Primary_EUF	May 29, 2022	3:55AM	AUS Leachate - Reagent Water	M22-My0072217	X		X	
43	SX_OB_20220529_08_00AM	May 29, 2022	8:00AM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220529_08_00_S_S_Primary_EU_F	May 29, 2022	8:00AM	AUS Leachate - Reagent Water	M22-My0072218				
44	SX_OB_20220529_08_09_S_S_Primary_EU_F	May 29, 2022	8:09AM	AUS Leachate - Reagent Water	M22-My0072219	X		X	
45	SX_OB_20220529_12_13_S_S_Primary_EU_F	May 29, 2022	12:13PM	AUS Leachate - Reagent Water	M22-My0072220	X		X	
46	SX_OB_20220529_16_06_S	May 29, 2022	4:06PM	AUS Leachate - Reagent	M22-My0072221	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 Day
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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			Water					
47	SX_OB_20220 529_16_08_S S_Duplicate_E UF	May 29, 2022	4:08PM	AUS Leachate - Reagent Water	M22- My0072222	X		X	
48	SX_OB_20220 529_20_02_S S_Primary_EU F	May 29, 2022	8:02PM	AUS Leachate - Reagent Water	M22- My0072223	X		X	
49	SX_OB_20220 530_00_06_S S_Primary_EU F	May 30, 2022	12:06AM	AUS Leachate - Reagent Water	M22- My0072224	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 30, 2022 4:45 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	892967	Due:	Jun 6, 2022
Project Name:	20220530043455-Eurofin-52	Phone:	08 8338 1009	Priority:	5 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_20220530_04_00_SS_Primary_EU_F	May 30, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0072225	X		X	
Test Counts						32	16	50	16

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)	%	120		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	92		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	94		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	97		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	95		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	83		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	98		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	119		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	98		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	94		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	98		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	68			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	111			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	97			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	120			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	127			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	105			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	112			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)								
Perfluorobutanesulfonic acid (PFBS)	%	79			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	92			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	72			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	86			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	89			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	99			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	99			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	78			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	96			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	112			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	131			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	96			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-My0069295	NCP	%	130		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0069295	NCP	%	107		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0069295	NCP	%	100		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0069295	NCP	%	99		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0069295	NCP	%	106		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0069295	NCP	%	92		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0069295	NCP	%	96		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0069295	NCP	%	121		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0069295	NCP	%	104		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0069295	NCP	%	120		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0069295	NCP	%	103		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	M22-My0069295	NCP	%	73		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0069295	NCP	%	118		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0069295	NCP	%	107		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0069295	NCP	%	113		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0069295	NCP	%	150		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-My0069295	NCP	%	113			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0069295	NCP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-My0069295	NCP	%	85			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0069295	NCP	%	61			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0069295	NCP	%	82			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0069295	NCP	%	112			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0069295	NCP	%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0069295	NCP	%	109			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0069295	NCP	%	90			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0069295	NCP	%	105			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0069295	NCP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0069295	NCP	%	135			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0069295	NCP	%	88			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-My0074469	NCP	ug/L	0.27	0.26	3.0	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0074469	NCP	ug/L	1.0	1.0	1.0	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0074469	NCP	ug/L	1.2	1.2	4.0	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0074469	NCP	ug/L	0.50	0.46	9.0	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0074469	NCP	ug/L	0.34	0.35	4.0	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0074469	NCP	ug/L	0.09	0.09	3.0	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0074469	NCP	ug/L	0.02	0.03	14	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0074469	NCP	ug/L	0.03	0.04	51	30%	Fail	Q15
Perfluorododecanoic acid (PFDoDA)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0074469	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0074469	NCP	ug/L	0.12	0.12	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0074469	NCP	ug/L	0.04	0.04	3.0	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0074469	NCP	ug/L	0.23	0.22	4.0	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0074469	NCP	ug/L	2.2	2.3	5.0	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0074469	NCP	ug/L	0.07	0.08	16	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0074469	NCP	ug/L	1.3	2.3	55	30%	Fail
Perfluorodecanesulfonic acid (PFDS)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Q15								
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0074469	NCP	ug/L	0.42	0.38	12	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0074469	NCP	ug/L	0.28	0.30	6.0	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0074469	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: Agon Environmental	SAMPLER: Brandon - Agon
ADDRESS / OFFICE: Melbourne	LR - EP Risk
PROJECT MANAGER (PM): Craig Trimbur	TG - Agon Enviro
PROJECT ID: JC827	Martha - Agon
SITE: 2022052904313 - ALS-52	MOBILE 1: +61 400 826 907 (Craig Trimbur)
RESULTS REQUIRED (Data): 5 days	MOBILE 2: +61 490 411 004 (David Lawson)
P.O. NO.:	LAB REPORTS TO: Labreports.TST@agonenviro.com.au
QUOTE NO.: ME-150-19 WESTP	LAB REPORTS TO: Labreports.TST@agonenviro.com.au
ANALYSIS REQUIRED INCLUDING SPLITTS (note - suite codes must be listed to attract suite prices)	LAB REPORTS TO: Labreports.TST@agonenviro.com.au

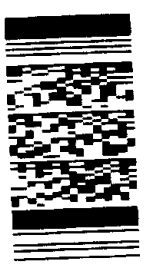
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	CONTAINER INFORMATION				Notes
							Spill Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	
1	SX_OB_20220528_08_11_SS_Primary_ALS	S	28/05/2022	08:11	Bucket	1	X	X	X	X	
2	SX_OB_20220528_08_12_SS_Duplicate_ALS	S	28/05/2022	08:12	Bucket	1	X	X	X	X	
3	SX_OB_20220528_08_38_SS_Blank_ALS	W	28/05/2022	08:38	Bottle	1					
4	SX_OB_20220528_08_37_SR_Presave_ALS	W	28/05/2022	08:37	Bottle	1					
5	SX_OB_20220528_12_23_SS_Primary_ALS	S	28/05/2022	12:23	Bucket	1	X	X	X	X	
7	SX_OB_20220528_16_09_SS_Primary_ALS	S	28/05/2022	16:09	Bucket	1	X	X	X	X	
8	SX_OB_20220528_16_15_SS_Triplicate_ALS	S	28/05/2022	16:15	Bucket	1	X	X	X	X	
9	SX_OB_20220528_18_54_SS_Primary_ALS	S	28/05/2022	19:54	Bucket	1	X	X	X	X	
10	SX_OB_20220528_04_03_SS_Primary_ALS	S	28/05/2022	04:03	Bucket	1	X	X	X	X	
11	SX_OB_20220529_07_59_SS_Duplicate_ALS	S	29/05/2022	07:59	Bucket	1	X	X	X	X	
12	SX_OB_20220529_12_00_SS_Primary_ALS	S	29/05/2022	12:00	Bucket	1	X	X	X	X	
13	SX_OB_20220529_16_02_SS_Primary_ALS	S	29/05/2022	16:02	Bucket	1	X	X	X	X	
14	SX_OB_20220529_16_09_SS_Triplicate_ALS	S	29/05/2022	16:09	Bucket	1	X	X	X	X	
15	SX_OB_20220529_16_38_SS_Blank_ALS	W	29/05/2022	16:38	Bottle	1					
16	SX_OB_20220529_16_38_SR_Presave_ALS	W	29/05/2022	16:38	Bottle	1					
17	SX_OB_20220529_20_06_SS_Primary_ALS	S	29/05/2022	20:06	Bucket	1	X	X	X	X	
18	SX_OB_20220530_00_02_SS_Primary_ALS	S	30/05/2022	0:02	Bucket	1	X	X	X	X	
19	SX_OB_20220530_04_07_SS_Primary_ALS	S	30/05/2022	4:07	Bucket	1	X	X	X	X	

NAME	DATE	TIME	NAME	DATE	TIME
RELINQUISHED BY: Martha			RECEIVED BY: Martha		
NAME: Agon	DATE: 30/5	TIME: 11:15	CORR NOTE NO.:		
NAME: Agon	DATE:	TIME:	TRANSPORT CO.:		

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl Preserved Plastic; HS = HCl Preserved Speciation bottles; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Solids; B = Unpreserved Bag.

AUSTRALIAN LABORATORY SERVICES P/L

COC Page 1 of 1



Environmental Division
Melbourne
Work Order Reference
EM2210053

Telephone: +61-3-9549 9600

CERTIFICATE OF ANALYSIS

Work Order : **EM2210053**
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 : 20220530043131-ALS-52
Sampler : Brandon Clarke, LR - EP Risk, MARTHA ERAZO, TOBY GRAY
Site : 20220530043131-ALS-52
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 34
No. of samples analysed : 34

Page : 1 of 42
Laboratory : Environmental Division Melbourne
Contact : Josh Alexander
Address : 4 Westall Rd Springvale VIC Australia 3171

Telephone : +61-3-8549 9600
Date Samples Received : 30-May-2022 11:15
Date Analysis Commenced : 30-May-2022
Issue Date : 07-Jun-2022 17:49



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
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

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

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

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

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

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

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

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

- EP231X: Poor matrix spike recovery for sample EM2209966-004 due to sample matrix interference.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- (EP231): (EM2209989_002) Poor matrix spike recovery for PFBA due to matrix effects.
- 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.
- EP231X-INJ: The direct injection LCMSMS method may be used where the sample matrix is not suitable for Solid Phase Extraction (e.g. significant particulate load) or where only a single sample container is received.



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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	%	99.1	101	91.3	105	95.7
13C8-PFOA	----	0.02	%	105	112	112	112	102



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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	85.7	112	88.9	69.0
13C8-PFOA	----	0.02	%	109	101	118	99.7	77.0



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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	%	121	85.2	98.1	82.0	84.8
13C8-PFOA	----	0.02	%	127	102	102	102	102



Analytical Results

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

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-020	EM2210053-021	EM2210053-022	EM2210053-023	EM2210053-024
				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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-020	EM2210053-021	EM2210053-022	EM2210053-023	EM2210053-024
				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	%	92.8	88.0	83.1	87.9	84.4
13C8-PFOA	----	0.02	%	89.1	87.1	91.3	88.1	78.0



Analytical Results

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

Sample ID

				SX_OB_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-025	EM2210053-026	EM2210053-027	EM2210053-028	EM2210053-029
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-025	EM2210053-026	EM2210053-027	EM2210053-028	EM2210053-029
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.6	96.0	103	93.0	86.0
13C8-PFOA	----	0.02	%	94.5	92.5	105	103	107



Analytical Results

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

Sample ID

				SX_OB_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 00:02	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-030	EM2210053-031	EM2210053-032	EM2210053-033	EM2210053-034
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 00:02	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-030	EM2210053-031	EM2210053-032	EM2210053-033	EM2210053-034
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.1	88.8	74.0	74.2	75.6
13C8-PFOA	----	0.02	%	102	98.1	105	72.7	90.4



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	8.0	8.0	8.0	7.8	7.9
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	28.3	31.9	28.7	29.0	29.6
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	42	41	35	36	82
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	81	101	87	60	104
Copper	7440-50-8	5	mg/kg	48	49	46	37	69
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	6
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	134	129	111	102	133
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	82	81	64	57	66
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	140	130	140	160
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.3	9.4	9.2	9.1	8.8
After HCl pH	----	0.1	pH Unit	1.2	1.2	1.3	1.2	1.2
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.1	5.1	5.1	5.1	5.1
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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				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	----
>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	<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



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<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



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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								
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	%	106	98.5	103	110	101
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	81.4	87.6	83.6	69.6	60.0
Toluene-D8	2037-26-5	0.1	%	88.5	91.9	71.6	65.0	57.2
4-Bromofluorobenzene	460-00-4	0.1	%	82.5	82.3	74.8	72.4	63.1
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	101	96.3	97.4	100	96.4
2-Chlorophenol-D4	93951-73-6	0.025	%	114	109	111	114	109
2,4,6-Tribromophenol	118-79-6	0.025	%	98.7	90.9	92.0	96.0	90.6
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	109	101	97.3	101	96.8
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	100	92.4	93.7	97.0	92.8
2-Fluorobiphenyl	321-60-8	0.025	%	105	97.5	98.2	103	97.2
Anthracene-d10	1719-06-8	0.025	%	103	95.1	96.9	104	97.7
4-Terphenyl-d14	1718-51-0	0.025	%	108	99.3	99.2	108	101



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_08 _11_SS_Primary_ALS	SX_OB_20220528_08 _12_SS_Duplicate_AL S	SX_OB_20220528_12 _23_SS_Primary_ALS	SX_OB_20220528_16 _09_SS_Primary_ALS	SX_OB_20220528_16 _15_SS_Triplicate_AL S
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-001	EM2210053-002	EM2210053-005	EM2210053-006	EM2210053-007
				Result	Result	Result	Result	Result
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	119	115	100	100	101
13C8-PFOA	----	0.0002	%	102	91.5	92.0	91.0	93.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl ₂)	----	0.1	pH Unit	8.1	8.3	8.0	8.0	8.1
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	31.5	10.9	2.5	37.6	21.7
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	56	54	27	40	32
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	80	80	46	86	58
Copper	7440-50-8	5	mg/kg	37	36	34	54	36
Lead	7439-92-1	5	mg/kg	6	8	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	92	74	88	137	105
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	54	44	49	83	57
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	160	150	190	160	170
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	8.9	8.6	9.0	9.0	8.9
After HCl pH	----	0.1	pH Unit	1.2	1.2	1.2	1.3	1.3
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.1	5.2	5.2	5.2	5.2
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				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_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-008	EM2210053-009	EM2210053-010	EM2210053-011	EM2210053-012
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	107	102	122	102	91.8
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	69.8	73.6	88.4	93.0	81.3
Toluene-D8	2037-26-5	0.1	%	57.1	73.5	79.0	78.6	74.6
4-Bromofluorobenzene	460-00-4	0.1	%	64.0	74.3	92.0	97.7	89.8
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	102	95.8	138	92.4	89.5
2-Chlorophenol-D4	93951-73-6	0.025	%	116	110	154	108	103
2,4,6-Tribromophenol	118-79-6	0.025	%	95.3	89.0	129	88.9	83.5
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	108	94.9	148	95.2	88.7
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	98.4	91.8	133	91.0	85.6
2-Fluorobiphenyl	321-60-8	0.025	%	103	96.7	137	95.2	90.6
Anthracene-d10	1719-06-8	0.025	%	101	96.1	135	93.8	88.3
4-Terphenyl-d14	1718-51-0	0.025	%	105	99.1	141	95.9	91.6
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	94.2	105	103	96.2	98.8
13C8-PFOA	----	0.0002	%	79.2	85.6	94.4	82.2	89.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	7.6	7.8	8.1	7.7	7.7
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	45.8	31.1	3.6	23.5	17.1
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	75	53	35	51	55
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	117	80	56	78	84
Copper	7440-50-8	5	mg/kg	54	35	27	30	47
Lead	7439-92-1	5	mg/kg	8	6	<5	6	6
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	91	79	73	53	60
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	54	49	42	33	36
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	120	120	170	<100	120
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	7.4	8.2	8.3	8.3	8.3
After HCl pH	----	0.1	pH Unit	1.3	1.1	1.1	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	5.1	5.1	5.1	5.1	5.1
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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 04:07	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-013	EM2210053-014	EM2210053-017	EM2210053-018	EM2210053-019
				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	%	95.3	101	110	99.0	117
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	92.0	75.5	81.8	86.2	79.4
Toluene-D8	2037-26-5	0.1	%	84.4	68.7	74.0	81.7	70.8
4-Bromofluorobenzene	460-00-4	0.1	%	101	84.9	85.9	97.8	90.8
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	91.8	95.0	102	92.9	109
2-Chlorophenol-D4	93951-73-6	0.025	%	106	110	118	105	124
2,4,6-Tribromophenol	118-79-6	0.025	%	85.2	89.9	97.4	88.5	103
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	89.2	101	107	104	107
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	88.4	93.6	99.4	91.7	104
2-Fluorobiphenyl	321-60-8	0.025	%	92.9	99.2	105	96.7	109
Anthracene-d10	1719-06-8	0.025	%	92.2	96.7	103	95.9	110
4-Terphenyl-d14	1718-51-0	0.025	%	93.9	100	109	99.2	116
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	89.5	97.9	90.4	96.1	99.0
13C8-PFOA	----	0.0002	%	77.6	91.6	97.8	90.8	90.8



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_08_11_SS_Primary_ALS	SX_OB_20220528_08_12_SS_Duplicate_ALS	SX_OB_20220528_12_23_SS_Primary_ALS	SX_OB_20220528_16_09_SS_Primary_ALS	SX_OB_20220528_16_15_SS_Triplicate_ALS
Sampling date / time				28-May-2022 08:11	28-May-2022 08:12	28-May-2022 12:23	28-May-2022 16:09	28-May-2022 16:15
Compound	CAS Number	LOR	Unit	EM2210053-020	EM2210053-021	EM2210053-022	EM2210053-023	EM2210053-024
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.9	10.0	10.0	9.7	9.8



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220528_19_54_SS_Primary_ALS	SX_OB_20220529_04_03_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS	SX_OB_20220529_07_59_SS_Duplicate_ALS	SX_OB_20220529_12_00_SS_Primary_ALS
Sampling date / time				28-May-2022 19:54	29-May-2022 04:03	29-May-2022 07:57	29-May-2022 07:59	29-May-2022 12:00
Compound	CAS Number	LOR	Unit	EM2210053-025	EM2210053-026	EM2210053-027	EM2210053-028	EM2210053-029
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.7	10.0	9.9	10.0	10.1



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220529_16_02_SS_Primary_ALS	SX_OB_20220529_16_09_SS_Triplicate_ALS	SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220530_00_02_SS_Primary_ALS	SX_OB_20220530_04_07_SS_Primary_ALS
Sampling date / time				29-May-2022 16:02	29-May-2022 16:09	29-May-2022 20:06	30-May-2022 00:02	30-May-2022 04:07
Compound	CAS Number	LOR	Unit	EM2210053-030	EM2210053-031	EM2210053-032	EM2210053-033	EM2210053-034
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.0	9.3	9.6	9.0	9.0



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220528_08 _38_SB_Blank_ALS	SX_OB_20220528_08 _37_SR_Rinsate_ALS	SX_OB_20220529_16 _38_SB_Blank_ALS	SX_OB_20220529_16 _38_SR_Rinsate_ALS	----
Sampling date / time				28-May-2022 08:38	28-May-2022 00:37	29-May-2022 16:38	29-May-2022 16:38	----	
Compound	CAS Number	LOR	Unit	EM2210053-003	EM2210053-004	EM2210053-015	EM2210053-016	-----	
				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	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220528_08 _38_SB_Blank_ALS	SX_OB_20220528_08 _37_SR_Rinsate_ALS	SX_OB_20220529_16 _38_SB_Blank_ALS	SX_OB_20220529_16 _38_SR_Rinsate_ALS	----
Sampling date / time				28-May-2022 08:38	28-May-2022 00:37	29-May-2022 16:38	29-May-2022 16:38	----	
Compound	CAS Number	LOR	Unit	EM2210053-003	EM2210053-004	EM2210053-015	EM2210053-016	-----	
				Result	Result	Result	Result	----	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	----	
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	86.8	94.7	102	90.9	----	
13C8-PFOA	----	0.02	%	99.7	102	106	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

QUALITY CONTROL REPORT

Work Order	: EM2210053	Page	: 1 of 42
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	: 30-May-2022
Order number	: ----	Date Analysis Commenced	: 30-May-2022
C-O-C number	: 20220530043131-ALS-52	Issue Date	: 07-Jun-2022
Sampler	: Brandon Clarke, LR - EP Risk, MARTHA ERAZO, TOBY GRAY		
Site	: 20220530043131-ALS-52		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 34		
No. of samples analysed	: 34		



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4372728)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	81	79	2.4	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	134	131	2.1	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	42	42	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	48	48	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	82	72	13.9	0% - 50%		
EM2210053-012	SX_OB_20220529_12_00_ SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	58	55	6.1	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	105	106	1.1	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	32	34	7.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	36	41	13.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	57	54	5.9	0% - 50%		



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4375189)									
EM2209845-007	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.6	7.6	0.0	0% - 20%
EM2209989-003	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4375190)									
EM2210053-006	SX_OB_20220528_16_09_ SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EM2210053-017	SX_OB_20220529_20_06_ SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	8.1	7.9	1.9	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4372842)									
EM2209989-001	Anonymous	EA055: Moisture Content	----	0.1	%	26.7	27.2	1.9	0% - 20%
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	28.3	33.0	15.5	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4372843)									
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	45.8	45.8	0.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4372729)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2210053-012	SX_OB_20220529_12_00_ SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4372743)									
EM2209989-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EM2209989-012	Anonymous	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: 4372744)									
EM2210053-013	SX_OB_20220529_16_02_ 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: 4376651)									
EM2209989-007	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2209849-002	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4376654)									
EM2210053-008	SX_OB_20220528_19_54_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2210053-019	SX_OB_20220530_04_07_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4372741)									
EM2209989-009	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	200	180	11.8	No Limit
EM2209989-012	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	140	140	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4372742)									
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	120	110	16.6	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 (%)	
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4372662)										
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4369538)										
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: meta- & para-Xylene	108-38-3	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	
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4369539)										
EM2210053-010	SX_OB_20220529_07_57_ 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	
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP074H: Naphthalene (QC Lot: 4369538)										
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
EP074H: Naphthalene (QC Lot: 4369539)										
EM2210053-010	SX_OB_20220529_07_57_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
EP074I: Volatile Halogenated Compounds (QC Lot: 4369538)										
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit	



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: 4369538) - continued									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	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
EP074I: Volatile Halogenated Compounds (QC Lot: 4369539)									
EM2210053-010	SX_OB_20220529_07_57_ SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit		
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4372664)									
EM2210053-001	SX_OB_20220528_08_11_ 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



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4372664) - continued									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_ 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
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit		
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4372664)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<20	<20	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<20	<20	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4372664)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_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: 4372664) - continued									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_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
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		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: 4372664)									
EM2210053-001	SX_OB_20220528_08_11_ 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



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: 4372664) - continued									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	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		
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4369538)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	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 Petroleum Hydrocarbons (QC Lot: 4369539)									
EM2210053-010	SX_OB_20220529_07_57_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4372663)									
EM2210053-001	SX_OB_20220528_08_11_ 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
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4369538)									
EM2210053-001	SX_OB_20220528_08_11_ SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4369539)									
EM2210053-010	SX_OB_20220529_07_57_ SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4372663)									
EM2210053-001	SX_OB_20220528_08_11_ 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
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4376298)									
EM2209474-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4376298) - continued									
EM2210053-011	SX_OB_20220529_07_59_ SS_Duplicate_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: 4376298)									
EM2209474-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2210053-011	SX_OB_20220529_07_59_ SS_Duplicate_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4376298)									
EM2209474-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4376298) - continued									
EM2209474-001	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_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: 4376298)									
EM2209474-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_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: 4376298)									
EM2209474-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231P: PFAS Sums (QC Lot: 4376298) - continued									
EM2209474-001	Anonymous	EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2210053-011	SX_OB_20220529_07_59_ SS_Duplicate_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									
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: 4378443)									
EM2209989-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209989-012	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4378580)									
EM2209989-013	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209989-021	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4379222)									
EM2209849-002	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit



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: 4379222) - continued									
EM2209849-002	Anonymous	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		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: 4379232)									
EM2209849-006	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2210053-029	SX_OB_20220529_12_00_ SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4383156)									
EM2210053-003	SX_OB_20220528_08_38_ SB_Blank_ALS	EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: 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: 4378443)									
EM2209899-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit



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: 4378443) - continued											
EM2209989-001	Anonymous	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		
EM2209989-012	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit		
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit		
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
		EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4378580)									
		EM2209989-013	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorononanoic acid (PFNA)	375-95-1			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8			0.02	µg/L	<0.02	<0.02	0.0	No Limit		
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7			0.05	µg/L	<0.05	<0.05	0.0	No Limit		
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4			0.1	µg/L	<0.1	<0.1	0.0	No Limit		
EM2209989-021	Anonymous			EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
				EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit		
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit		



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4378580) - continued									
EM2209989-021	Anonymous	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: 4379222)									
EM2209849-002	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EM2210053-013	SX_OB_20220529_16_02_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01
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: 4379232)									
EM2209849-006	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EM2210053-029	SX_OB_20220529_12_00_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3			0.02	µg/L	<0.02	<0.02	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4379232) - continued									
EM2210053-029	SX_OB_20220529_12_00_ SS_Primary_ALS	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: 4383156)									
EM2210053-003	SX_OB_20220528_08_38_ SB_Blank_ALS	EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	<0.10	0.0	No Limit		
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4378443)									
EM2209989-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209989-012	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4378443) - continued									
EM2209989-012	Anonymous	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: 4378580)									
EM2209989-013	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209989-021	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4379222)									
EM2209849-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4379222) - continued									
EM2209849-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4379232)									
EM2209849-006	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



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: 4379232) - continued									
EM2210053-029	SX_OB_20220529_12_00_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4383156)									
EM2210053-003	SX_OB_20220528_08_38_ SB_Blank_ALS	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: 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: 4378443)									
EM2209989-001	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
EM2209989-012	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4378443) - continued									
EM2209989-012	Anonymous	EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4378580)									
EM2209989-013	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
EM2209989-021	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4379222)									
EM2209849-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4379232)									



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: 4379232) - continued									
EM2209849-006	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
EM2210053-029	SX_OB_20220529_12_00_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4383156)									
EM2210053-003	SX_OB_20220528_08_38_SB_Blank_ALS	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: 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: 4378443)									
EM2209989-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2209989-012	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4378580)									
EM2209989-013	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2209989-021	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	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 (%)
EP231P: PFAS Sums (QC Lot: 4378580) - continued									
EM2209989-021	Anonymous	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: 4379222)									
EM2209849-002	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2210053-013	SX_OB_20220529_16_02_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: 4379232)									
EM2209849-006	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2210053-029	SX_OB_20220529_12_00_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: 4383156)									
EM2210053-003	SX_OB_20220528_08_38_SB_Blank_ALS	EP231X-INJ: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X-INJ: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit



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

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

Sub-Matrix: **SOIL**

Method: 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: 4372728)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	94.2	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	69.8	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	99.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	93.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	92.7	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	88.7	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	94.2	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	95.8	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	81.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	77.6	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4374055)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.8	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4374056)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.8	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4375189)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	100	98.8	101
				----	7 pH Unit	101	99.3	101
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4375190)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4372729)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	83.6	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4372743)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	86.1	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4372744)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	87.1	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4376651)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	95.0	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4376654)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	99.6	70.0	130
EK040T: Fluoride Total (QCLot: 4372741)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	82.4	75.2	110



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	
EK040T: Fluoride Total (QCLot: 4372742)									
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	76.9	75.2	110	
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4372662)									
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	108	67.4	136	
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4369538)									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	103	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	96.4	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	92.7	66.6	115	
EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	4.2 mg/kg	93.1	65.2	112	
	106-42-3								
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	92.4	69.4	111	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	91.4	68.4	110	
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4369539)									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	88.4	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	86.8	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	84.3	66.6	115	
EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	4.2 mg/kg	83.6	65.2	112	
	106-42-3								
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	87.5	69.4	111	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	85.9	68.4	110	
EP074H: Naphthalene (QCLot: 4369538)									
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	101	72.3	114	
EP074H: Naphthalene (QCLot: 4369539)									
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	89.2	72.3	114	
EP074I: Volatile Halogenated Compounds (QCLot: 4369538)									
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	86.4	47.0	138	
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	85.5	57.6	125	
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	89.1	72.3	115	
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	89.0	60.5	122	
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	90.2	70.3	112	
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	90.4	66.6	115	
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	91.0	64.4	122	
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	90.2	58.4	127	
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	96.7	72.9	114	
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	102	64.7	115	
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	116	72.6	116	
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	98.6	60.0	119	
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	98.4	71.8	116	
EP074-UT: 1,1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	# 123	66.1	116	



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: 4369538) - continued									
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	85.9	39.8	128	
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	96.0	70.3	113	
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	94.7	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	96.4	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	87.6	48.4	120	
EP074I: Volatile Halogenated Compounds (QCLot: 4369539)									
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	95.9	47.0	138	
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	86.6	57.6	125	
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	93.3	72.3	115	
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	86.6	60.5	122	
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	87.4	70.3	112	
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	92.6	66.6	115	
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	87.1	64.4	122	
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	84.8	58.4	127	
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	101	72.9	114	
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	88.0	64.7	115	
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	96.3	72.6	116	
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	81.2	60.0	119	
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	86.3	71.8	116	
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	92.5	66.1	116	
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	84.8	39.8	128	
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	88.1	70.3	113	
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	87.4	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	89.8	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	86.1	48.4	120	
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4372664)									
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	95.5	74.5	126	
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	95.3	72.7	126	
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	96.3	73.5	132	
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	96.5	72.8	128	
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	96.9	73.3	134	
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	94.2	72.4	128	
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	92.7	69.4	126	
EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	97.7	71.9	128	
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	92.5	54.4	135	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4372664)									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	97.1	71.5	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	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4372664) - continued									
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	97.6	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	98.7	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	92.0	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	96.3	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	78.0	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	95.9	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	89.0	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	91.7	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	87.7	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4372664)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	96.4	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	96.9	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	97.4	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	97.6	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	98.8	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	98.2	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	98.7	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	98.9	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	101	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	101	75.0	133	
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	103	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	101	65.1	130	
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	103	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	103	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	103	71.3	134	
EP075I: Organochlorine Pesticides (QCLot: 4372664)									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	98.8	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	98.4	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	99.5	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	99.9	70.8	130	
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	99.2	76.5	134	
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	97.3	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	98.6	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	98.1	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	99.4	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	98.1	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	99.2	69.4	134	
EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	102	71.0	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	
EP075I: Organochlorine Pesticides (QCLot: 4372664) - continued									
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	100	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	95.1	69.0	143	
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	91.8	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	101	71.4	135	
EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	101	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	101	70.2	135	
EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	99.8	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	100	63.6	135	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4369538)									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	91.0	61.1	119	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4369539)									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	84.0	61.1	119	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4372663)									
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	113	74.4	129	
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	111	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	100	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	108	70.0	130	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4369538)									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	92.5	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
	X								
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4369539)									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	82.2	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
	X								
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4372663)									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	114	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	113	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	108	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	113	70.0	130	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4376298)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	81.8	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	109	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	72.3	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	99.1	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	103	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	98.7	59.0	134	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4376298)									



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	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4376298) - continued									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	84.4	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.6	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.5	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.8	69.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	113	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	78.4	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.6	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.4	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.0	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4376298)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.4	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.3	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	103	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	83.9	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	105	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	112	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.6	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4376298)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	106	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	94.5	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	108	65.0	137	
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	96.6	70.0	130	
EP231P: PFAS Sums (QCLot: 4376298)									
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 (%)		Acceptable Limits (%)	
						LCS	Low	High	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4378443)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	94.6	72.0	130	



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	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4378443) - continued									
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	100	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	99.6	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	98.4	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	94.0	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	87.4	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4378580)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	74.6	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	75.9	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	75.5	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	79.0	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	78.2	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	73.8	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4379222)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	107	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	102	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	91.4	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	108	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	101	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	95.0	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4379232)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	107	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	94.1	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	91.0	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	99.7	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	88.1	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	79.0	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4383156)									
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.444 µg/L	93.9	72.0	130	
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.47 µg/L	100	71.0	127	
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.457 µg/L	90.3	68.0	131	
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.477 µg/L	105	69.0	134	
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.465 µg/L	86.9	65.0	140	
EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.482 µg/L	86.7	53.0	142	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4378443)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	84.5	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	130	



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: 4378443) - continued									
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	95.5	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	112	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	106	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.2	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	96.7	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	92.4	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	114	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4378580)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	77.6	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	# 71.3	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	88.3	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	83.0	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	76.4	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	77.8	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	82.2	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	69.1	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	82.6	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	77.6	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	86.0	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4379222)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	99.7	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	100	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	116	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	93.8	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.0	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	95.0	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	81.6	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	113	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4379232)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.1	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	97.4	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	96.6	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	115	69.0	130	



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: 4379232) - continued								
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	85.8	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	96.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	116	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4383156)								
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	88.3	73.0	129
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	89.8	72.0	129
EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.5 µg/L	93.3	72.0	129
EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.5 µg/L	87.3	72.0	130
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	90.3	71.0	133
EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.5 µg/L	87.1	69.0	130
EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.5 µg/L	87.8	71.0	129
EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.5 µg/L	86.9	69.0	133
EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.5 µg/L	95.5	72.0	134
EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	92.7	65.0	144
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	94.2	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4378443)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	109	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	118	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	90.6	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	108	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	105	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	93.4	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	96.0	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4378580)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	83.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	74.1	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	79.8	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	82.3	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	78.7	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	83.0	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: 4378580) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	69.5	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4379222)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	109	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	135	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	94.0	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	113	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	96.4	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	84.8	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	112	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4379232)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	118	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	107	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	88.4	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	105	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	96.6	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	86.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	109	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4383156)								
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	87.1	67.0	137
EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	1.25 µg/L	101	68.0	141
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	95.4	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	90.1	70.0	130
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	90.1	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	98.6	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	83.0	61.0	135



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: 4378443)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	108	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	108	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	102	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	82.6	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4378580)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	83.6	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	89.6	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	92.4	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	89.9	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4379222)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	112	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	108	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 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	89.2	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4379232)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	99.9	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	99.0	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	126	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	81.5	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4383156)								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.469 µg/L	98.8	63.0	143
EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.476 µg/L	87.6	64.0	140
EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.48 µg/L	95.7	67.0	138
EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.483 µg/L	76.8	70.0	130
EP231P: PFAS Sums (QCLot: 4378443)								
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: 4378580)								
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: 4379222)								
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	----	----	----	----



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
EP231P: PFAS Sums (QCLot: 4379222) - continued								
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4379232)								
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: 4383156)								
EP231X-INJ: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery(%) MS	Acceptable Limits (%)	
				Low	High		
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4372728)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	114	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.9	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	104	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	106	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	96.7	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	80.8	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	90.9	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4372729)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	109	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4372743)							
EM2209989-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	85.6	58.0	114
EM2209989-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	98.4	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4372744)							
EM2210053-014	SX_OB_20220529_16_09_SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	90.1	58.0	114
EM2210053-014	SX_OB_20220529_16_09_SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	98.8	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4376651)							
EM2209845-013	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	95.6	70.0	130



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
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4376654)							
EM2210053-009	SX_OB_20220529_04_03_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	98.4	70.0	130
EK040T: Fluoride Total (QCLot: 4372741)							
EM2209989-002	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	101	70.0	130
EK040T: Fluoride Total (QCLot: 4372742)							
EM2210053-014	SX_OB_20220529_16_09_SS_Triplicate_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	97.4	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4372662)							
EM2210053-005	SX_OB_20220528_12_23_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	108	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4369538)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	97.1	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	93.5	55.1	124
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4369539)							
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	93.0	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	97.0	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4369538)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	74.8	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	94.2	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	89.2	55.5	122
EP074I: Volatile Halogenated Compounds (QCLot: 4369539)							
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	81.0	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	85.9	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	86.9	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4372664)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	94.8	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	98.0	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	81.8	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4372664)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP075-EM: Phenol	108-95-2	3 mg/kg	95.4	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	91.9	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4372664)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	91.0	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	96.7	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4369538)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	69.8	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4369539)							
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	77.3	42.3	111



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4372663)							
EM2210053-006	SX_OB_20220528_16_09_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	115	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	112	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	102	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	110	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4369538)							
EM2210053-002	SX_OB_20220528_08_12_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	61.8	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4369539)							
EM2210053-011	SX_OB_20220529_07_59_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	73.5	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4372663)							
EM2210053-006	SX_OB_20220528_16_09_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	116	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	114	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	111	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	114	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4376298)							
EM2209966-004	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	84.5	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	92.4	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	87.0	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	109	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	98.4	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	# 46.6	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4376298)							
EM2209966-004	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	87.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	107	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	76.5	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	89.0	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	84.9	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	107	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	84.9	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	79.5	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	92.4	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	119	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	92.3	69.0	133
		EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4376298)					
EM2209966-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	104	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	108	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	84.0	70.0	130



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: 4376298) - continued							
EM2209966-004	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	82.1	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	99.4	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	99.4	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	102	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4376298)							
EM2209966-004	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	98.5	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	89.8	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	92.2	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	# 33.0	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: 4378443)							
EM2209989-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	111	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	89.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	90.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.4	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	93.9	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	87.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4378580)							
EM2209989-014	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	87.2	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	87.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	86.4	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	88.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	98.2	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4379222)							
EM2209849-004	Anonymous	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	99.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	94.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	112	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	96.5	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	88.9	53.0	142



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: 4379232)							
EM2209849-007	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	113	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	106	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	98.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	96.3	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	81.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4383156)							
EM2210053-004	SX_OB_20220528_08_37_SR_Rinsate_ALS	EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.444 µg/L	89.9	72.0	130
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.47 µg/L	101	71.0	127
		EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.457 µg/L	88.1	68.0	131
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.477 µg/L	105	69.0	134
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.465 µg/L	86.4	65.0	140
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.482 µg/L	82.6	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4378443)							
EM2209989-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	# 43.9	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	112	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	104	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	107	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	97.4	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	124	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	97.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	99.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	98.3	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	86.7	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	121	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4378580)							
EM2209989-014	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	74.6	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	81.4	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	94.8	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	98.8	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	91.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	91.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	87.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	76.7	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	87.2	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	85.3	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	92.2	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4379222)							



Sub-Matrix: WATER

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery(%) MS	Acceptable Limits (%)	
				Low	High		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4379222) - continued							
EM2209849-004	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	108	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	104	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	104	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	100	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	117	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	94.5	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	99.0	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	95.5	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	128	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4379232)							
EM2209849-007	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	73.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	104	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	100	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	99.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	114	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	91.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	95.0	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	78.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	102	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4383156)							
EM2210053-004	SX_OB_20220528_08_37_SR_Rinsate_ALS	EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 µg/L	84.8	73.0	129
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 µg/L	82.9	72.0	129
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 µg/L	87.9	72.0	129
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 µg/L	87.8	72.0	130
		EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 µg/L	80.1	71.0	133
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.5 µg/L	86.8	69.0	130
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.5 µg/L	93.9	71.0	129
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 µg/L	98.7	69.0	133
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 µg/L	90.7	72.0	134
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 µg/L	76.9	65.0	144
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 µg/L	92.0	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4378443)							
EM2209989-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	112	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: 4378443) - continued							
EM2209989-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	100	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	75.6	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	92.0	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	98.1	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	119	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4378580)							
EM2209989-014	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	91.7	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	87.4	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	79.6	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	79.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	82.6	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	88.0	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	73.4	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4379222)							
EM2209849-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	108	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	129	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	94.7	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	106	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	95.6	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	112	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4379232)							
EM2209849-007	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	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: 4379232) - continued							
EM2209849-007	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	114	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	78.3	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	94.1	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	87.8	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.9	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	96.1	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4383156)							
EM2210053-004	SX_OB_20220528_08_37_SR_Rinsate_ALS	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 µg/L	90.1	67.0	137
		EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 µg/L	87.4	68.0	141
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 µg/L	87.8	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 µg/L	97.6	70.0	130
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 µg/L	83.5	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.5 µg/L	103	65.0	136
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.5 µg/L	84.3	61.0	135
		EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4378443)					
EM2209989-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	121	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	110	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	114	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	91.8	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4378580)							
EM2209989-014	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	97.6	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	95.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	122	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	92.6	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4379222)							
EM2209849-004	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	103	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	103	64.0	140



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: 4379222) - continued							
EM2209849-004	Anonymous	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	91.0	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4379232)							
EM2209849-007	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	108	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	114	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	85.4	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4383156)							
EM2210053-004	SX_OB_20220528_08_37_SR_Rinsate_ALS	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.469 µg/L	99.9	63.0	143
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.476 µg/L	84.5	64.0	140
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.48 µg/L	94.1	67.0	138
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.483 µg/L	70.6	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2210053	Page	: 1 of 19
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 30-May-2022
Site	: 20220530043131-ALS-52	Issue Date	: 07-Jun-2022
Sampler	: Brandon Clarke, LR - EP Risk, MARTHA ERAZO, TOBY GRAY	No. of samples received	: 34
Order number	: ----	No. of samples analysed	: 34

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

- **NO** Method Blank value outliers occur.
- **NO** Duplicate outliers occur.
- Laboratory Control outliers exist - please see following pages for full details.
- Matrix Spike outliers exist - please see following pages for full details.
- Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP074I: Volatile Halogenated Compounds	QC-4369538-001	----	1.1.2.2-Tetrachloroethane	79-34-5	123 %	66.1-116%	Recovery greater than upper control limit
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	EM2209966--004	Anonymous	Perfluorodecane sulfonic acid (PFDS)	335-77-3	46.6 %	59.0-134%	Recovery less than lower data quality objective
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2209966--004	Anonymous	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	33.0 %	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
Laboratory Control Spike (LCS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	QC-4378580-002	----	Perfluoropentanoic acid (PFPeA)	2706-90-3	71.3 %	72.0-129%	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2209989--002	Anonymous	Perfluorobutanoic acid (PFBA)	375-22-4	43.9 %	73.0-129%	Recovery less than lower data quality objective

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075S: Acid Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	Phenol-d6	13127-88-3	138 %	63.0-134 %	Recovery greater than upper data quality objective
EP075S: Acid Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	2-Chlorophenol-D4	93951-73-6	154 %	59.8-125 %	Recovery greater than upper data quality objective
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	Nitrobenzene-D5	4165-60-0	148 %	63.4-131 %	Recovery greater than upper data quality objective
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	1,2-Dichlorobenzene-D4	2199-69-1	133 %	61.0-124 %	Recovery greater than upper data quality objective
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	2-Fluorobiphenyl	321-60-8	137 %	68.9-131 %	Recovery greater than upper data quality objective
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)	EM2210053-010	SX_OB_20220529_07_57_SS	Anthracene-d10	1719-06-8	135 %	69.6-133 %	Recovery greater than upper data quality objective



Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	04-Jun-2022	✓	02-Jun-2022	02-Jun-2022	✓
Soil Glass Jar - Unpreserved (EA001)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	05-Jun-2022	✓	02-Jun-2022	02-Jun-2022	✓
Soil Glass Jar - Unpreserved (EA001)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	06-Jun-2022	✓	02-Jun-2022	02-Jun-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	----	----	----	01-Jun-2022	11-Jun-2022	✓
Soil Glass Jar - Unpreserved (EA055)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	----	----	----	01-Jun-2022	12-Jun-2022	✓
Soil Glass Jar - Unpreserved (EA055)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	----	----	----	01-Jun-2022	13-Jun-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	
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	03-Jun-2022	24-Nov-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	03-Jun-2022	25-Nov-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	03-Jun-2022	26-Nov-2022	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	25-Jun-2022	✓	03-Jun-2022	25-Jun-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	26-Jun-2022	✓	03-Jun-2022	26-Jun-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	27-Jun-2022	✓	03-Jun-2022	27-Jun-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)								
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	25-Jun-2022	✓	02-Jun-2022	08-Jun-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	26-Jun-2022	✓	02-Jun-2022	08-Jun-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	27-Jun-2022	✓	02-Jun-2022	08-Jun-2022	✓



Matrix: SOIL

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EK026SF: Total CN by Segmented Flow Analyser								
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	11-Jun-2022	✓	03-Jun-2022	16-Jun-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	12-Jun-2022	✓	03-Jun-2022	16-Jun-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	13-Jun-2022	✓	03-Jun-2022	16-Jun-2022	✓
EK040T: Fluoride Total								
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	25-Jun-2022	✓	02-Jun-2022	25-Jun-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	26-Jun-2022	✓	02-Jun-2022	26-Jun-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	27-Jun-2022	✓	02-Jun-2022	27-Jun-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_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	24-Nov-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	25-Nov-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-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	
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_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	24-Nov-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	25-Nov-2022	✓	----	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-2022	✓	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066-EM)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	30-May-2022	04-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220529_04_03_SS_Primary_ALS		29-May-2022	30-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	29-May-2022	31-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	31-May-2022	06-Jun-2022	✓	31-May-2022	06-Jun-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	
EP074H: Naphthalene								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	30-May-2022	04-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_04_03_SS_Primary_ALS		29-May-2022	30-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	29-May-2022	31-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	31-May-2022	06-Jun-2022	✓	31-May-2022	06-Jun-2022	✓
EP074I: Volatile Halogenated Compounds								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	30-May-2022	04-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_04_03_SS_Primary_ALS		29-May-2022	30-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	29-May-2022	31-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	31-May-2022	06-Jun-2022	✓	31-May-2022	06-Jun-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-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	
EP075A: Phenolic Compounds (Non-halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓



Matrix: SOIL

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	30-May-2022	04-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_04_03_SS_Primary_ALS		29-May-2022	30-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	29-May-2022	31-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	31-May-2022	06-Jun-2022	✓	31-May-2022	06-Jun-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								
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	01-Jun-2022	11-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	30-May-2022	04-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	01-Jun-2022	12-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220529_04_03_SS_Primary_ALS		29-May-2022	30-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	29-May-2022	31-May-2022	05-Jun-2022	✓	31-May-2022	05-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	13-Jun-2022	✓	02-Jun-2022	11-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	31-May-2022	06-Jun-2022	✓	31-May-2022	06-Jun-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X)								
SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X)								
SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	02-Jun-2022	12-Jul-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								
HDPE Soil Jar (EP231X) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	02-Jun-2022	12-Jul-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								
HDPE Soil Jar (EP231X) SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS	28-May-2022	02-Jun-2022	24-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS	SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS,	29-May-2022	02-Jun-2022	25-Nov-2022	✓	02-Jun-2022	12-Jul-2022	✓
HDPE Soil Jar (EP231X) SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220530_04_07_SS_Primary_ALS	30-May-2022	02-Jun-2022	26-Nov-2022	✓	02-Jun-2022	12-Jul-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_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS, SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS, SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS	01-Jun-2022	03-Jun-2022	28-Nov-2022	✓	03-Jun-2022	28-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ) SX_OB_20220528_08_38_SB_Blank_ALS,	SX_OB_20220528_08_37_SR_Rinsate_ALS	28-May-2022	07-Jun-2022	24-Nov-2022	✓	07-Jun-2022	24-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ) SX_OB_20220529_16_38_SB_Blank_ALS,	SX_OB_20220529_16_38_SR_Rinsate_ALS	29-May-2022	07-Jun-2022	25-Nov-2022	✓	07-Jun-2022	25-Nov-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_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS, SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS, SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS	01-Jun-2022	03-Jun-2022	28-Nov-2022	✓	03-Jun-2022	28-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220528_08_38_SB_Blank_ALS,	SX_OB_20220528_08_37_SR_Rinsate_ALS	28-May-2022	07-Jun-2022	24-Nov-2022	✓	07-Jun-2022	24-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220529_16_38_SB_Blank_ALS,	SX_OB_20220529_16_38_SR_Rinsate_ALS	29-May-2022	07-Jun-2022	25-Nov-2022	✓	07-Jun-2022	25-Nov-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS, SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS, SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS	01-Jun-2022	03-Jun-2022	28-Nov-2022	✓	03-Jun-2022	28-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220528_08_38_SB_Blank_ALS,	SX_OB_20220528_08_37_SR_Rinsate_ALS	28-May-2022	07-Jun-2022	24-Nov-2022	✓	07-Jun-2022	24-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220529_16_38_SB_Blank_ALS,	SX_OB_20220529_16_38_SR_Rinsate_ALS	29-May-2022	07-Jun-2022	25-Nov-2022	✓	07-Jun-2022	25-Nov-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_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS, SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS, SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS	01-Jun-2022	03-Jun-2022	28-Nov-2022	✓	03-Jun-2022	28-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220528_08_38_SB_Blank_ALS,	SX_OB_20220528_08_37_SR_Rinsate_ALS	28-May-2022	07-Jun-2022	24-Nov-2022	✓	07-Jun-2022	24-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220529_16_38_SB_Blank_ALS,	SX_OB_20220529_16_38_SR_Rinsate_ALS	29-May-2022	07-Jun-2022	25-Nov-2022	✓	07-Jun-2022	25-Nov-2022	✓
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X)								
SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS, SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS,	SX_OB_20220528_08_12_SS_Duplicate_ALS, SX_OB_20220528_16_09_SS_Primary_ALS, SX_OB_20220528_19_54_SS_Primary_ALS, SX_OB_20220529_07_57_SS_Primary_ALS, SX_OB_20220529_12_00_SS_Primary_ALS, SX_OB_20220529_16_09_SS_Triplicate_ALS, SX_OB_20220530_00_02_SS_Primary_ALS, SX_OB_20220528_08_11_SS_Primary_ALS, SX_OB_20220528_12_23_SS_Primary_ALS, SX_OB_20220528_16_15_SS_Triplicate_ALS, SX_OB_20220529_04_03_SS_Primary_ALS, SX_OB_20220529_07_59_SS_Duplicate_ALS, SX_OB_20220529_16_02_SS_Primary_ALS, SX_OB_20220529_20_06_SS_Primary_ALS, SX_OB_20220530_04_07_SS_Primary_ALS	01-Jun-2022	03-Jun-2022	28-Nov-2022	✓	03-Jun-2022	28-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220528_08_38_SB_Blank_ALS,	SX_OB_20220528_08_37_SR_Rinsate_ALS	28-May-2022	07-Jun-2022	24-Nov-2022	✓	07-Jun-2022	24-Nov-2022	✓
HDPE (no PTFE) (EP231X-INJ)								
SX_OB_20220529_16_38_SB_Blank_ALS,	SX_OB_20220529_16_38_SR_Rinsate_ALS	29-May-2022	07-Jun-2022	25-Nov-2022	✓	07-Jun-2022	25-Nov-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	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	3	25	12.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	3	25	12.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	3	25	12.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	25	16.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	25	8.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	15	13.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	2	25	8.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	25	8.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	25	8.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	15	13.33	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	Regular	Actual	Expected	Evaluation	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	25	16.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	25	8.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	15	13.33	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	Regular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	8	73	10.96	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	73	5.48	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	73	5.48	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	73	5.48	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
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-INJ	WATER	In house: Direct injection analysis of fresh waters after dilution (1:1) with mobile phase solvent. Analysis by LC-Electrospray-MS-MS, Negative Mode using MRM. Where commercially available, isotopically labelled analogues of the target analytes are used as internal standards for quantification. Where a labelled analogue is not commercially available, the internal standard with similar chemistry and the closest retention time to the target is used for quantification. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers.

Preparation Methods	Method	Matrix	Method Descriptions
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.
Preparation for PFAS in water.	EP231-PR	WATER	Method presumes direct injection without workup. Preparation includes addition of internal standard and surrogate, and filtration prior to analysis.