

# TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	E01.0220220606090304_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	732	Approx. Source Tunnel Chainage To	753
Approx. Rings From	308	Approx. Rings To	317
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	E01.02	Start of Filling From (Time / date)	24/05/2022
Tonnes Put in Holding Bay No:	7699.4	Finish of Filling (Time / Date)	26/05/2022
Classified Volume (LCM)	4000	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1:210.53	Approx. Bank Cubic Meters (BCM)	4013.82

## 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_20220524_19_59_SS_DUPLICATE_EUF	SX_OB_20220525_04_18_SS_Primary_ALS	SX_OB_20220525_16_07_SS_Primary_EUF
SX_OB_20220524_19_59_SS_PRIMARY_Y_EUF	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_16_09_SS_Duplicate_EUF
SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_16_09_SS_Triplicate_ALS
SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220525_08_11_SS_Triplicate_EUF	SX_OB_20220525_16_15_SS_Primary_ALS
SX_OB_20220524_23_57_SS_Primary_ALS	SX_OB_20220525_12_03_SS_Primary_EUF	SX_OB_20220525_20_14_SS_Primary_ALS
SX_OB_20220525_00_03_SS_PRIMARY_Y_EUF	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_20_23_SS_Primary_EUF
SX_OB_20220525_04_00_SS_PRIMARY_Y_EUF		
Total Sample Numbers	19	Ratio Acceptable
Primary Sample Numbers	13	Yes
Classified Volume (LCM)	4000 m <sup>3</sup>	
Volume: Sample Number Ratio (Samples per LCM)	1:210.53	

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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>	<b>No</b>
<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 &lt;75% of the containment criteria?</p> <p>If the answer is Yes, go to C. If the answer is No, go to D.</p>	<b>Yes</b>
<p>C. If the answer to B is Yes, then was <b>testing</b> 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>	<b>No</b>
<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>	<b>NA</b>
<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>	<b>Yes – See section 4</b>
<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>	<b>No</b>

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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

<b>Need for IWRG 621.1 or 655.1 Testing</b>	
A. Is Spoil in this Holding Bay from a Zone of Exception or Anomalous and required testing for IWRG 621.1?	<b>No</b>
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?	<b>No</b>
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?	<b>Yes</b>
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)?	<b>No</b>
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?	<b>No</b>
<b>Outcome from IWRG 621.1 testing (if needed)</b>	
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.	<b>No</b>
<b>Outcome from IWRG 655.1 testing (if needed)</b>	
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	<b>NA</b>
<b>Outcome from PFAS Testing</b>	
H. Do test results for PFAS (see Table 3.4-4 below) permit NPIW Containment as a spoil Classification Outcome?	<b>Yes</b>
<b><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></b>	
<b>Notes:</b>	
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	19*	13	1:210.53	19	36	57.26	69.81	180	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Chromium (Hexavalent)	mg/kg	1	19*	13	1:210.53	8	<1.0	1.32	N/A	1.7	1	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Nickel	mg/kg	5	19*	13	1:210.53	19	107	140	149.2	210	60	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	19*	13	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	19*	13	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	19*	13	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	19*	13	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	19*	13	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	19*	13	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	19*	13	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"> <li>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"> <li>a. <b>Arsenic</b> – <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"> <li>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.</li> </ol> <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> </li> <li>b. <b>Nickel</b> – <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"> <li>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).</li> <li>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).</li> <li>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.</li> </ol> </li> </ol> </li> </ol>

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iv. Enriched nickel concentrations also corresponded with enriched copper (Two soil and rock) and zinc (all units) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

Golder therefore concluded that the nickel is likely associated with geochemical enrichment rather than added contamination.

The Golder study found that based on review of the depth, site history and the geochemical association of elements, the reported elevated concentrations of arsenic and nickel are considered representative of geogenic conditions and are not expected to be associated with contamination.

2. Previous reviews of the presence of **hexavalent chromium (CrVI)** in soil data outlined on the SAQP (Rev 5) were undertaken by Golders (2017) and later consolidated with data compiled by Mikkonen by AJJV (2019). The AJJV review of the consolidated data set identified:

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

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

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

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

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

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

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

Test	Element Exceeding Criteria	Victorian Background Soil Database Soil greater than 5.4m below surface										Findings		Classification as PIW				
		Coast	Delta	Min	Max	Mean	Median	Standard Deviation	Count of Exceedance	95% UCL	Fill Material Upper Limit	Coast	Delta		Max	Mean	95% UCL Statistical Assessment	Victorian Soil Database Assessment
Other Volatiles	Fluoride	84	1	50	800	204	185	100	2	225.1	450	92	<100	790	263	Not Exceeding	Natural Origin	No Affect
	Acetic	101	84	+4	800	33	7	115	25	84.8	20	256	±10	3200	33	Exceeding	Natural Origin	No Affect
	Cadmium	103	6	-0.1	3	0.52	0.5	0.41	2	NA	3	-	-	-	-	NA	No Data	No Affect
	Chromium (VI)	84	15	+0.5	2.8	0.923	0.7	0.562	3	84.38	1	-	-	-	-	NA	No Data	Potentially
	Copper	101	86	+5	326	55	55	44	15	82.4	600	739	+25	87	+25	Not Exceeding	No Data	No Affect
	Mercury	101	7	-0.1	1.7	0.073	0.35	0.17	1	NA	1	-	-	-	-	NA	No Data	No Affect
	Nickel	101	90	+2	451	127	115	73	88	140.6	60	800	+25	170	29	Exceeding	Natural Origin	No Affect
Zinc	101	96	+5	483	84	83	79	6	98.7	200	819	+25	198	+25	Not Exceeding	No Data	No Affect	

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

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

2.	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.

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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
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	Nickel
	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
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold									
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold									
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold									
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold									
EPA Victoria IWRG621 Category B Leached Upper Limits									
EPA Victoria IWRG621 Category B Upper Limits	2,000	400	20,000		2,000	6,000	300	4,000	12,000
EPA Victoria IWRG621 Category C Leached Upper Limits									
EPA Victoria IWRG621 Category C Upper Limits	500	100	5,000		500	1,500	75	1,000	3,000
EPA Victoria IWRG621 Fill Upper Limits	20	3	100		1	300	1	40	60

Location Code	Field ID	Sample Code	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample	Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	M22-My0060324	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060323	42	<1	63	180	<1	<5	<0.1	<5	150
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	M22-My0060336	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060335									
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	M22-My0060348	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060347									
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	M22-My0060323	24/05/2022	891520	Eurofins Environment ANZ	Normal		55	<1	53	120	<1	5.4	<0.1	<5	130
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	M22-My0060335	24/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	M22-My0060347	24/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	EM2209652009	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060323	46	<1	47	108	1.0	<5	<0.1	<5	111
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	EM2209652020	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060347									
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	EM2209652010	24/05/2022	EM2209652	ALSE-Melbourne	Normal		52	<1	65	121	<1.0	<5	<0.1	<5	158
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	EM2209652021	24/05/2022	EM2209652	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	EM2209652011	25/05/2022	EM2209652	ALSE-Melbourne	Normal		49	<1	61	115	1.0	<5	<0.1	<5	150
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	EM2209652022	25/05/2022	EM2209652	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	M22-My0060326	25/05/2022	891520	Eurofins Environment ANZ	Normal		87	<1	79	170	<1	6.0	<0.1	<5	210
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	M22-My0060338	25/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	M22-My0060350	25/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	M22-My0060327	25/05/2022	891520	Eurofins Environment ANZ	Normal		54	<1	59	150	<1	6.0	<0.1	<5	150
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	M22-My0060339	25/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	M22-My0060351	25/05/2022	891520	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	EM2209652013	25/05/2022	EM2209652	ALSE-Melbourne	Normal		43	<1	58	96	<1.0	<5	<0.1	<5	132
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	EM2209652024	25/05/2022	EM2209652	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	EM2209724002	25/05/2022	EM2209724	ALSE-Melbourne	Normal		44	<1	45	109	1.1	<5	<0.1	<5	134
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	EM2209724013	25/05/2022	EM2209724	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	EM2209724003	25/05/2022	EM2209724	ALSE-Melbourne	Field_D	EM2209724002	46	<1	45	105	1.4	<5	<0.1	<5	117
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	EM2209724014	25/05/2022	EM2209724	ALSE-Melbourne	Field_D	EM2209724013									
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	M22-My0062729	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724002	47	<1	49	130	<1	5.3	<0.1	<5	130
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	M22-My0062745	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724002									
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	M22-My0062757	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724013									
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	M22-My0062731	25/05/2022	891845	Eurofins Environment ANZ	Normal		55	<1	55	130	<1	6.0	<0.1	<5	140
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	M22-My0062747	25/05/2022	891845	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	M22-My0062759	25/05/2022	891845	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	EM2209724004	25/05/2022	EM2209724	ALSE-Melbourne	Normal		45	<1	46	112	1.7	<5	<0.1	<5	127
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	EM2209724015	25/05/2022	EM2209724	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	M22-My0062733	25/05/2022	891845	Eurofins Environment ANZ	Normal		44	<1	48	120	<1	5.2	<0.1	<5	140
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	M22-My0062749	25/05/2022	891845	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	M22-My0062761	25/05/2022	891845	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	M22-My0062734	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062733	49	<1	56	130	<1	6.1	<0.1	<5	160
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	M22-My0062750	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062749									
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	M22-My0062762	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062761									
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	EM2209724005	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062733	60	<1	50	109	1.5	6	<0.1	<5	125
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	EM2209724016	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062761									
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	EM2209724006	25/05/2022	EM2209724	ALSE-Melbourne	Normal		54	<1	54	101	1.4	<5	<0.1	<5	129
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	EM2209724017	25/05/2022	EM2209724	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	EM2209724008	25/05/2022	EM2209724	ALSE-Melbourne	Normal		36	<1	38	85	1.5	<5	<0.1	<5	107
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	EM2209724019	25/05/2022	EM2209724	ALSE-Melbourne	Normal										
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	M22-My0062739	25/05/2022	891845	Eurofins Environment ANZ	Normal		180	<1	73	250	<1	9.2	<0.1	7.4	160
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	M22-My0062753	25/05/2022	891845	Eurofins Environment ANZ	Normal										
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	M22-My0062765	25/05/2022	891845	Eurofins Environment ANZ	Normal										

	Selenium	Silver	Tin	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
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	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	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																						
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	200	720		140,000	400									20								
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits	50	180	500	35,000	100									5								
EPA Victoria IWRG621 Fill Upper Limits	10	10	50	200	20									1								

Location Code	Field ID	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+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	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<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	<0.5	<0.5	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																							
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																							
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<5	<2	<10	96			<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	
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	<5	<2	<10	72	<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	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																							
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	<5	<2	<10	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																							
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	<5	<2	<10	91	<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	
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																							
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<5	<2	<10	140			<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	
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	<5	<2	<10	110			<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	
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	<5	<2	<10	77	<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	
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<5	<2	<10	80	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																							
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<5	<2	<10	74	<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	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																							
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<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	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																							
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																							
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<5	<2	<10	94			<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	
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																							
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																							
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	<5	<2	<10	85	<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	
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<5	<2	<10	85			<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	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<5	<2	<10	100			<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	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<5	<2	<10	73	<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	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																							
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	<5	<2	<10	86	<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	
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																							
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	<5	<2	<10	65	<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	
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																							
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<5	<2	<10	93			<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	
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																							
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																							

					BTEX						TRH						TPH					
	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.1	0.1	0.1	0.1	0.2	0.3	20	20	50	50	100	100	50	20	20	50	50	50
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																						
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													2,600				40,000
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits				100	4													650				10,000
EPA Victoria IWRG621 Fill Upper Limits				20	1													100				1,000

Location Code	Field ID	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																							
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																							
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																							
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																							
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																							
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																							
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																							
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																							
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																							
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																							
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																							
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																							
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																							
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																							
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																							
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																							
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																							
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																							
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																							

	Organochlorine Pesticides																					
	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	α-BHC	β-BHC	γ-BHC
EQL	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	0.03	0.05	0.05	0.05	0.05	0.05	0.05
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																						
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			4.8				50							16				4.8				
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits			1.2				50							4				1.2				
EPA Victoria IWRG621 Fill Upper Limits																						

Location Code	Field ID	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	α-BHC	β-BHC	γ-BHC
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																						
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																						
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	0.10	0.07	0.17	<0.05	<0.05	0.07	0.07	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.2			<0.05	<0.05	0.08	<0.05	0.07	0.12
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																						
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																						
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																						
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																						
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																						
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																						
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																						
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																						
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																						
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																						

	γ-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vc	Other organochlorine pesticides EPA Vc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vc	Phenols (non-halogenated) EPA Vc	2,4-Dimethylphenol	2-Methylphenol
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.05	0.05	0.5	0.1	0.03	0.5	0.5	1	1	0.5	1	1	0.05	5	10	0.03	0.5	20	1	20	0.5	0.2
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																						
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					50														320	2,200		
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits					10														10	560		
EPA Victoria IWRG621 Fill Upper Limits				1															1	60		

Location Code	Field ID	γ-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vc	Other organochlorine pesticides EPA Vc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vc	Phenols (non-halogenated) EPA Vc	2,4-Dimethylphenol	2-Methylphenol
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																						
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																						
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.05	<0.05	<0.5	0.8	0.56	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																						
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																						
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																						
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																						
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																						
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																						
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																						
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																						
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																						
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5	<20			<0.5	<0.2
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																						
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																						











	Chlorinated Hydrocarbons																		NA		Arochlor 1232		
	Chloromethane	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAV/c	Trichloroethene	Chlorinated hydrocarbons EPAV/c	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			
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05		1	0.1	
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																							
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					11	50						4.8											
EPA Victoria IWRG621 Category C Leached Upper Limits																							
EPA Victoria IWRG621 Category C Upper Limits					2.8	10						1.2											
EPA Victoria IWRG621 Fill Upper Limits								1															

Location Code	Field ID																						
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																			<0.05			
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																			<0.05			
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	33.3	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																			<0.05			
E01.02	SX_OB_20220524_20_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	<0.50	<0.50	<0.50	<10.0	<0.05	35.4	
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220524_23_57_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	<0.50	<0.50	<0.50	<10.0	<0.05	32.2	
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220525_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	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																			<0.05			
E01.02	SX_OB_20220525_04_18_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	<0.50	<0.50	<0.50	<10.0	<0.05	31.1	
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_08_09_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	<0.50	<0.50	<0.50	<10.0	<0.05	32.0	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	31.8	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																			<0.05			
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																			<0.05			
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																			<0.05			
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																			<0.05			
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	32.3	
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																			<0.05			
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																			<0.05			
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	30.5	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																			<0.05			
E01.02	SX_OB_20220525_16_15_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	<0.50	<0.50	<0.50	<10.0	<0.05	32.0	
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10.0	<0.05	29.1	
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																			<0.05			
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		<0.1	
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																			<0.05			
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																			<0.05			

	PCBs							Inorganics							Halogenated Benzenes							
	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of leaching Fluid	pH (aqueous extract)	Fluoride	Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																						
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													40,000		10,000							
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limits													10,000		2,500							
EPA Victoria IWRG621 Fill Upper Limits							2						450		50							

Location Code	Field ID	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of leaching Fluid	pH (aqueous extract)	Fluoride	Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		5.1		4.9											
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF									8.6		5.9											
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					6.3	<100	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF									5.1		4.9											
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF									8.8		5.9											
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS							<0.1	1.4	5.1	8.8	5.0		140		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS									9.4													
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS							<0.1	1.3	5.0	8.8	5.0		140		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS									9.3													
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS							<0.1	1.4	5.1	8.5	5.0		160		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS									9.0													
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					6.4	340	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF									5.1		4.9											
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF									8.7		5.9											
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.3	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF									5.1		4.9											
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF									8.7		5.9											
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS							<0.1	1.4	5.1	9.0	5.0		180		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS									9.7													
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							<0.1	1.2	5.1	8.6	5.0		110		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS									8.9													
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS							<0.1	1.1	5.1	8.5	5.0		130		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS									9.0													
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF									5.1		4.9											
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF									6.2		4.9											
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.4	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF									5.0		4.9											
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF									7.5		4.9											
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS							<0.1	1.2	5.1	8.4	5.0		140		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS									9.2													
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.3	170	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF									5.0		4.9											
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF									8.1		4.9											
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF									5.0		4.9											
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF									7.9		4.9											
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS							<0.1	1.1	5.1	8.5	5.0		140		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS									9.1													
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS							<0.1	1.2	5.1	8.6	5.0		150		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS									9.2													
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS							<0.1	1.2	5.1	8.3	5.0		160		<5	<0.50	<0.50		<0.50		<0.50	
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS									9.4													
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.4	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF									5.0		4.9											
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF									8.4		4.9											

	Halogenated Hydrocarbons					MAH						Solvents				SPOCAS	
	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPA/Vic	1,3,5-trimethylbenzene	Styrene	Iso propylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Thresho																	
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Thresho																	
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Thresho																	
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	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPA/Vic	1,3,5-trimethylbenzene	Styrene	Iso propylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)	
E01.02	SX_OB_20220524_19_59_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		
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																		
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF																		
E01.02	SX_OB_20220524_19_59_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		
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS							<0.5		<0.5									8.2
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS																		
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS							<0.5		<0.5									7.9
E01.02	SX_OB_20220524_20_07_SS_Primary_ALS																		
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS							<0.5		<0.5									7.8
E01.02	SX_OB_20220524_23_57_SS_Primary_ALS																		
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220525_00_03_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220525_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	
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220525_04_00_SS_PRIMARY_EUF																		
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS							<0.5		<0.5									7.9
E01.02	SX_OB_20220525_04_18_SS_Primary_ALS																		
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							<0.5		<0.5									7.5
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																		
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS							<0.5		<0.5									7.6
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																		
E01.02	SX_OB_20220525_08_11_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	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																		
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																		
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																		
E01.02	SX_OB_20220525_12_03_SS_Primary_EUF																		
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS							<0.5		<0.5									7.7
E01.02	SX_OB_20220525_12_14_SS_Primary_ALS																		
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																		
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																		
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																		
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																		
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS							<0.5		<0.5									7.6
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																		
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS							<0.5		<0.5									7.7
E01.02	SX_OB_20220525_16_15_SS_Primary_ALS																		
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS							<0.5		<0.5									7.6
E01.02	SX_OB_20220525_20_14_SS_Primary_ALS																		
E01.02	SX_OB_20220525_20_23_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	
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																		
E01.02	SX_OB_20220525_20_23_SS_Primary_EUF																		

							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	5	2
Location Code	Field ID	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample												
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal		65	<1	70	150	<1	5.0	<0.1	<5	180	<5	<2	
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060319	64	<1	74	150	<1	5.2	<0.1	<5	220	<5	<2	
RPD							2	0	6	0	0	4	0	0	20	0	0	
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal		65	<1	70	150	<1	5.0	<0.1	<5	180	<5	<2	
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060319	57	<1	64	115	1.0	<5	<0.1	<5	159	<5	<2	
RPD							13	0	9	26	0	0	0	0	12	0	0	
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060333												
RPD																		
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060345												
RPD																		
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060345												
RPD																		
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal		55	<1	53	120	<1	5.4	<0.1	<5	130	<5	<2	
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060323	42	<1	63	180	<1	<5	<0.1	<5	150	<5	<2	
RPD							27	0	17	40	0	8	0	0	14	0	0	
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal		55	<1	53	120	<1	5.4	<0.1	<5	130	<5	<2	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060323	46	<1	47	108	1.0	<5	<0.1	<5	111	<5	<2	
RPD							18	0	12	11	0	8	0	0	16	0	0	
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060335												
RPD																		
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	24/05/2022	891520	Eurofins Environment ANZ	Field_D	M22-My0060347												
RPD																		
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	24/05/2022	891520	Eurofins Environment ANZ	Normal													
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Interlab_D	M22-My0060347												
RPD																		
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Normal		20	<1	56	94	1.6	<5	<0.1	<5	142	<5	<2	
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Field_D	EM2209652001	21	1	63	114	1.4	<5	<0.1	<5	164	<5	<2	
RPD							5	0	12	19	13	0	0	0	14	0	0	
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Normal		20	<1	56	94	1.6	<5	<0.1	<5	142	<5	<2	
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF	24/05/2022	891520	Eurofins Environment ANZ	Interlab_D	EM2209652001	28	<1	92	180	<1	<5	<0.1	<5	260	<5	<2	
RPD							33	0	49	63	46	0	0	0	59	0	0	
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Normal		20	<1	56	94	1.6	<5	<0.1	<5	142	<5	<2	
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF	24/05/2022	891520	Eurofins Environment ANZ	Interlab_D	EM2209652001												
RPD																		
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Normal													
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Field_D	EM2209652014												
RPD																		
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS	24/05/2022	EM2209652	ALSE-Melbourne	Normal													
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF	24/05/2022	891520	Eurofins Environment ANZ	Interlab_D	EM2209652014												
RPD																		
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal		32	<1	67	130	<1	<5	<0.1	<5	200	<5	<2	
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062737	25	<1	52	99	<1	<5	<0.1	<5	150	<5	<2	
RPD							25	0	25	27	0	0	0	0	29	0	0	
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal		32	<1	67	130	<1	<5	<0.1	<5	200	<5	<2	
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062737	31	<1	58	104	1.6	<5	<0.1	<5	179	<5	<2	
RPD							3	0	14	22	46	0	0	0	11	0	0	
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal													
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062751												
RPD																		
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal													
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062763												
RPD																		
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal													
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062763												
RPD																		
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal		44	<1	48	120	<1	5.2	<0.1	<5	140	<5	<2	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062733	49	<1	56	130	<1	6.1	<0.1	<5	160	<5	<2	

							Metals										
							Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
RPD							11	0	15	8	0	16	0	0	13	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal		44	<1	48	120	<1	5.2	<0.1	<5	140	<5	<2
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062733	60	<1	50	109	1.5	6	<0.1	<5	125	<5	<2
RPD							31	0	4	10	40	14	0	0	11	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal												
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062749											
RPD																	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal												
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Field_D	M22-My0062761											
RPD																	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	25/05/2022	891845	Eurofins Environment ANZ	Normal												
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Interlab_D	M22-My0062761											
RPD																	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Normal		44	<1	45	109	1.1	<5	<0.1	<5	134	<5	<2
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Field_D	EM2209724002	46	<1	45	105	1.4	<5	<0.1	<5	117	<5	<2
RPD							4	0	0	4	24	0	0	0	14	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Normal		44	<1	45	109	1.1	<5	<0.1	<5	134	<5	<2
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724002	47	<1	49	130	<1	5.3	<0.1	<5	130	<5	<2
RPD							7	0	9	18	10	6	0	0	3	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Normal		44	<1	45	109	1.1	<5	<0.1	<5	134	<5	<2
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724002											
RPD																	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Normal												
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Field_D	EM2209724013											
RPD																	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	25/05/2022	EM2209724	ALSE-Melbourne	Normal												
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	25/05/2022	891845	Eurofins Environment ANZ	Interlab_D	EM2209724013											
RPD																	

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

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

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





		PAH																					
		Tin	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
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
RPD		0	16			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<10	85			<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
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<10	73	<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	15			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<10	80	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<10	74	<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	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<10	80	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_08_11_SS_Triplicate_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
RPD		0	10			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<10	80	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							

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

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

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



		BTEX							TRH							TPH					Aldrin	Dieldrin	
		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)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw



		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	γ-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
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																						
RPD																							
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																						
RPD																							

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betwe



		Phenols																				
	Toxaphene	Organochlorine pesticides EPA Vc	Other organochlorine pesticides EPA Vc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vc	Phenols (non-halogenated) EPA Vc	2,4-Dimethylphenol	2-Methylphenol	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
RPD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<5	<10	<0.5	<20				<0.5	<0.2	<1	<5
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.00	<0.05	<5	<0.03	<20	<1.00	<20	<1	<1	<1	<5	
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																					
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																					
RPD																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																					
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF																					
RPD																						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF																					
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS																					
RPD																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<0.03	<20	<1.00	<20	<1	<1	<1	<5	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<0.03	<20	<1.00	<20	<1	<1	<1	<5	
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<0.03	<20	<1.00	<20	<1	<1	<1	<5	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<5	<10	<0.5	<20				<0.5	<0.2	<1	<5
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5	<0.03	<20	<1.00	<20	<1	<1	<1	<5	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																					
RPD																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																					
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS																					
RPD																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS																					
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF																					
RPD																						

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw



Table with columns for chemical names and their respective concentration limits in mg/kg and mg/L. Includes compounds like 3,4-Methylphenol, 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-perfluorooctanesulfonamide doacetic acid (NEFOSAA), N-ethylperfluorooctanesulfonamide (NEFOSA), and N-Methyl perfluorooctane sulfonamide (MNEFOSA).

Main data table with columns for Location Code, Field ID, and various chemical concentration measurements. Rows are organized by field ID (e.g., B02.03, E01.02, D03.02, B04.03, E01.02) and include RPD (Residual Persistence Data) values.

		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-perfluorooctanesulfonamide (NEFOSAA)	N-ethylperfluorooctanesulfonamide (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
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.4	<5	<20	<0.5	<1	<20	<0.0005	<0.0005	<0.0005	<0.0100	<0.0005	<0.0005	<0.0005	<0.0005
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<1	<5	<20	<1			<0.00005	<0.00050	<0.00005	<0.00050	<0.00005	<0.00050	<0.00005	<0.00050
RPD		0	0	0	0			0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS							<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100
RPD		0	0	0	0			0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.4	<5	<20	<0.5	<1	<20	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005
RPD		0	0	0	0			0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0100
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS							<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF							<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005
RPD								0	0	0	0	0	0	0	0

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw



		PFOS/PFOA																							
		N-methylperfluorooctane sulfonamideacetic acid (NMeFO5AA)		N-Methylperfluorooctanesulfonamideethanol (N-MeFO5E)		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
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_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
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
E01.02	SX_OB_20220525_08_11_SS_Triplicate_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
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD			0		0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
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  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw



		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
RPD			0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD					0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD			0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD			0		0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS			<0.00001		<0.00005		<0.00002		<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD					0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD					0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF		<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
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD					0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS			<0.00001		<0.00005		<0.00002		<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS			<0.00001		<0.00005		<0.00002		<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD					0		0		0		0		0		0		0		0		0		0
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS			<0.00001		<0.00005		<0.00002		<0.00002				<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD					0		0		0		0		0		0		0		0		0		0

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betwe



		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														
RPD		0		0		0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.00001	<0.0050					<0.00010	<0.0500		<0.50		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD		0						0		0			0				0		0	0	0		
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
RPD		0		0		0		0															
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
RPD		0		0		0		0															
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS	<0.00001						<0.00010															
RPD		0						0															
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00001	<0.0050					<0.00010	<0.0500		<0.50		<0.50				<0.50		<0.50	<0.50	<0.50		
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.00001	<0.0050					<0.00010	<0.0500		<0.50		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD		0	0					0	0		0		0				0		0	0	0		
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00001	<0.0050					<0.00010	<0.0500		<0.50		<0.50				<0.50		<0.50	<0.50	<0.50		
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD		0						0		0			0				0		0	0	0		
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00001	<0.0050					<0.00010	<0.0500		<0.50		<0.50				<0.50		<0.50	<0.50	<0.50		
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
RPD		0						0															
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00001						<0.00010															
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS	<0.00001						<0.00010															
RPD		0						0															
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS	<0.00001						<0.00010															
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.0001															
RPD		0						0															

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw



		Chlorinated Hydrocarbons															NA					
		Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPA VC	Trichloroethene	Chlorinated hydrocarbons EPA VC	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	Archlor 1232	Archlor 1242	Archlor 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	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg
EQ1		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05		1	0.1	0.1	0.1
Location Code	Field ID																					
B02.03	SX OB_20220524_16_08_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	<10			<0.1	<0.1	<0.1
B02.03	SX OB_20220524_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	<10			<0.1	<0.1	<0.1
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
B02.03	SX OB_20220524_16_08_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	<10			<0.1	<0.1	<0.1
B02.03	SX OB_20220524_16_09_SS_Triplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<10.0	<0.05	32.4			
RPD			0	0	0	0	0	0		0		0			0	0	0					
B02.03	SX OB_20220524_16_08_SS_PRIMARY_EUF																<0.05					
B02.03	SX OB_20220524_16_08_SS_DUPLICATE_EUF																<0.05					
RPD																	0					
B02.03	SX OB_20220524_16_08_SS_PRIMARY_EUF																<0.05					
B02.03	SX OB_20220524_16_08_SS_DUPLICATE_EUF																<0.05					
RPD																	0					
B02.03	SX OB_20220524_16_08_SS_PRIMARY_EUF																<0.05					
B02.03	SX OB_20220524_16_09_SS_Triplicate_ALS																<0.05					
RPD																						
E01.02	SX OB_20220524_19_59_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	<10			<0.1	<0.1	<0.1
E01.02	SX OB_20220524_19_59_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	<10			<0.1	<0.1	<0.1
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
E01.02	SX OB_20220524_19_59_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	<10			<0.1	<0.1	<0.1
E01.02	SX OB_20220524_20_00_SS_Triplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<10.0	<0.05	33.3			
RPD			0	0	0	0	0	0		0		0			0	0	0					
E01.02	SX OB_20220524_19_59_SS_PRIMARY_EUF																<0.05					
E01.02	SX OB_20220524_19_59_SS_DUPLICATE_EUF																<0.05					
RPD																	0					
E01.02	SX OB_20220524_19_59_SS_PRIMARY_EUF																<0.05					
E01.02	SX OB_20220524_19_59_SS_DUPLICATE_EUF																<0.05					
RPD																	0					
E01.02	SX OB_20220524_19_59_SS_PRIMARY_EUF																<0.05					
E01.02	SX OB_20220524_20_00_SS_Triplicate_ALS																<0.05					
RPD																						
D03.02	SX IB_20220524_08_05_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	<0.50	<10.0	<0.05	28.4			
D03.02	SX IB_20220524_08_05_SS_Duplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<10.0	<0.05	30.1			
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6			
D03.02	SX IB_20220524_08_05_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	<0.50	<10.0	<0.05	28.4			
D03.02	SX IB_20220524_08_06_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	<10			<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
D03.02	SX IB_20220524_08_05_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	<0.50	<10.0	<0.05	28.4			
D03.02	SX IB_20220524_08_06_SS_Triplicate_EUF																<0.05					
RPD																	0					
D03.02	SX IB_20220524_08_05_SS_Primary_ALS																<0.05					
D03.02	SX IB_20220524_08_05_SS_Duplicate_ALS																<0.05					
RPD																	0					
D03.02	SX IB_20220524_08_05_SS_Primary_ALS																<0.05					
D03.02	SX IB_20220524_08_06_SS_Triplicate_EUF																<0.05					
RPD																						
B04.03	SX IB_20220525_20_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B04.03	SX IB_20220525_20_03_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	<10			<0.1	<0.1	<0.1
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
B04.03	SX IB_20220525_20_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
B04.03	SX IB_20220525_20_04_SS_Triplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<10.0	<0.05	33.7			
RPD			0	0	0	0	0	0		0		0			0	0	0					
B04.03	SX IB_20220525_20_03_SS_Primary_EUF																<0.05					
B04.03	SX IB_20220525_20_03_SS_Duplicate_EUF																<0.05					
RPD																	0					
B04.03	SX IB_20220525_20_03_SS_Primary_EUF																<0.05					
B04.03	SX IB_20220525_20_04_SS_Triplicate_ALS																<0.05					
RPD																						
E01.02	SX OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
E01.02	SX OB_20220525_16_09_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1

Chlorinated Hydrocarbons																	NA					
Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPA/VIC	Trichloroethene	Chlorinated hydrocarbons EPA/VIC	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	
RPD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<10.0	<0.05	30.5				
RPD		0	0	0	0	0	0	0	0	0	0			0	0	0						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															<0.05						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF															<0.05						
RPD																0						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															<0.05						
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF															<0.05						
RPD																0						
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															<0.05						
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS															<0.05						
RPD																						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			<0.50	<0.50	<10.0	<0.05	32.0				
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			<0.50	<0.50	<10.0	<0.05	31.8				
RPD		0	0	0	0	0	0	0	0	0	0			0	0	0	0	1				
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			<0.50	<0.50	<10.0	<0.05	32.0				
E01.02	SX_OB_20220525_08_11_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	<10			<0.1	<0.1	<0.1	
RPD		0	0	0	0	0	0	0	0	0	0			0	0	0						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			<0.50	<0.50	<10.0	<0.05	32.0				
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF															<0.05						
RPD																0						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS															<0.05						
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS															<0.05						
RPD																0						
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS															<0.05						
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF															<0.05						
RPD																						

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betw

		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
EQL		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID																						
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.5	200	32	<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				2	67	0	0	0	0	0	0	0	0	0	0	0	0
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS					<0.1	1.4	5.1	8.7	5.0	150		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0					40		0	0	0		0			0			
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF							5.3		4.9													
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF							5.1		4.9													
RPD								4		0													
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF							5.6		6.3													
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF							5.7		6.3													
RPD								2		0													
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF							5.6		6.3													
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS							9.4															
RPD								5.1															
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.3	<100	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.2	<100	34	<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				26	0	0	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.3	<100	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS					<0.1	1.4	5.1	8.8	5.0	140		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0					33		0	0	0		0			0			
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF							5.1		4.9													
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF							5.1		4.9													
RPD								0		0													
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF							8.8		5.9													
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF							8.6		5.9													
RPD								2		0													
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF							8.8		5.9													
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS							9.4															
RPD								7															
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.1	1.4	5.1	9.3	5.0	220		<5	<0.50	<0.50		<0.50			<0.50			
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS					<0.1	1.4	5.1	9.2	5.0	220		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0	0	0	1	0	0		0	0	0		0			0			
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.1	1.4	5.1	9.3	5.0	220		<5	<0.50	<0.50		<0.50			<0.50			
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.9	130	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD						0					51		0	0	0		0			0			
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.1	1.4	5.1	9.3	5.0	220		<5	<0.50	<0.50		<0.50			<0.50			
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF							5.1		4.9													
RPD								0		2													
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS							9.4															
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS							9.6															
RPD								2															
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS							9.4															
D03.02	SX_IB_20220524_08_06_SS_Triplicate_EUF							8.9		5.9													
RPD								5															
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				10	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				10	<100	27	<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	17	0	0	0	0	0	0	0	0	0	0	
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				10	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS					<0.1	1.2	5.2	9.8	5.0	150		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0					40		0	0	0		0			0			
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF							5.3		4.9													
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF							5.3		4.9													
RPD								0		0													
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF							9.2		4.9													
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF							9.2		4.9													
RPD								0		0													
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF							9.2		4.9													
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS							10.0															
RPD								8															
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.3	170	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

		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
RPD		0	0	0	0	0	-	-	-	-	52	3	0	0	0	0	0	0	0	0	0	0	0
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.3	170	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS					<0.1	1.1	5.1	8.5	5.0	140		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0					19		0	0	0		0			0			
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							5.0		4.9													
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF							5.0		4.9													
RPD								0		0													
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							8.1		4.9													
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF							7.9		4.9													
RPD								2		0													
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF							8.1		4.9													
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS							9.1															
RPD								12															
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.1	1.2	5.1	8.6	5.0	110		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS					<0.1	1.1	5.1	8.5	5.0	130		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
RPD						0	9	0	1	0	17		0	0	0		0			0		0	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.1	1.2	5.1	8.6	5.0	110		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.4	<100	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD						0					10		0	0	0		0			0		0	
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.1	1.2	5.1	8.6	5.0	110		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF							5.1		4.9													
RPD								0		2													
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							8.9															
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS							9.0															
RPD								1															
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS							8.9															
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF							6.2		4.9													
RPD								36															

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betwe

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)
B02.03	SX_OB_20220524_16_08_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	
B02.03	SX_OB_20220524_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	
B02.03	SX_OB_20220524_16_08_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	
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS					<0.5	<0.5									7.9
RPD							0									
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF															
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF															
RPD																
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF															
B02.03	SX_OB_20220524_16_08_SS_DUPLICATE_EUF															
RPD																
B02.03	SX_OB_20220524_16_08_SS_PRIMARY_EUF															
B02.03	SX_OB_20220524_16_09_SS_Triplicate_ALS															
RPD																
E01.02	SX_OB_20220524_19_59_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	
E01.02	SX_OB_20220524_19_59_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	
E01.02	SX_OB_20220524_19_59_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	
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS					<0.5	<0.5									8.2
RPD							0									
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF															
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF															
RPD																
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF															
E01.02	SX_OB_20220524_19_59_SS_DUPLICATE_EUF															
RPD																
E01.02	SX_OB_20220524_19_59_SS_PRIMARY_EUF															
E01.02	SX_OB_20220524_20_00_SS_Triplicate_ALS															
RPD																
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.5	<0.5									7.8
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS					<0.5	<0.5									7.9
RPD						0	0									1
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.5	<0.5									7.8
D03.02	SX_IB_20220524_08_06_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	
RPD							0									
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS					<0.5	<0.5									7.8
D03.02	SX_IB_20220524_08_06_SS_TRIPLICATE_EUF															
RPD																
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS															
D03.02	SX_IB_20220524_08_05_SS_Duplicate_ALS															
RPD																
D03.02	SX_IB_20220524_08_05_SS_Primary_ALS															
D03.02	SX_IB_20220524_08_06_SS_TRIPLICATE_EUF															
RPD																
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.03	SX_IB_20220525_20_03_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	
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS					<0.5	<0.5									9.1
RPD							0									
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF															
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF															
RPD																
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF															
B04.03	SX_IB_20220525_20_03_SS_Duplicate_EUF															
RPD																
B04.03	SX_IB_20220525_20_03_SS_Primary_EUF															
B04.03	SX_IB_20220525_20_04_SS_Triplicate_ALS															
RPD																
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

		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	-
RPD		0	0	0	0		0	0	0	0	0	0	0	0	0	
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS					<0.5	<0.5									7.6
RPD							0									
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF															
RPD																
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															
E01.02	SX_OB_20220525_16_09_SS_Duplicate_EUF															
RPD																
E01.02	SX_OB_20220525_16_07_SS_Primary_EUF															
E01.02	SX_OB_20220525_16_09_SS_Triplicate_ALS															
RPD																
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.5	<0.5									7.5
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS					<0.5	<0.5									7.6
RPD						0	0									1
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.5	<0.5									7.5
E01.02	SX_OB_20220525_08_11_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	
RPD							0									
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS					<0.5	<0.5									7.5
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF															
RPD																
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS															
E01.02	SX_OB_20220525_08_10_SS_Duplicate_ALS															
RPD																
E01.02	SX_OB_20220525_08_09_SS_Primary_ALS															
E01.02	SX_OB_20220525_08_11_SS_Triplicate_EUF															
RPD																

\*RPDs have only been considered where a concentration is greater than 1 times the  
 \*\*Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for e  
 \*\*\*Interlab Duplicates are matched on a per compound basis as methods vary betwe

# TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	E01.0220220606090304_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

**UCL Statistics for Uncensored Full Data Sets**

User Selected Options

Date/Time of Computation ProUCL 5.16/06/2022 10:10:52 AM  
 From File WorkSheet.xls  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

**Arsenic**

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	36	Mean	57.26
Maximum	180	Median	49
SD	31.54	Std. Error of Mean	7.235
Coefficient of Variation	0.551	Skewness	3.657

**Normal GOF Test**

Shapiro Wilk Test Statistic 0.499  
 5% Shapiro Wilk Critical Value 0.901  
 Lilliefors Test Statistic 0.371  
 5% Lilliefors Critical Value 0.197

**Shapiro Wilk GOF Test**

Data Not Normal at 5% Significance Level

**Lilliefors GOF Test**

Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level**

**Assuming Normal Distribution**

**95% Normal UCL**

95% Student's-t UCL 69.81

**95% UCLs (Adjusted for Skewness)**

95% Adjusted-CLT UCL (Chen-1995) 75.65  
 95% Modified-t UCL (Johnson-1978) 70.82

**Gamma GOF Test**

A-D Test Statistic 2.569  
 5% A-D Critical Value 0.742  
 K-S Test Statistic 0.332  
 5% K-S Critical Value 0.199

**Anderson-Darling Gamma GOF Test**

Data Not Gamma Distributed at 5% Significance Level

**Kolmogorov-Smirnov Gamma GOF Test**

Data Not Gamma Distributed at 5% Significance Level

**Data Not Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

k hat (MLE)	6.67	k star (bias corrected MLE)	5.652
Theta hat (MLE)	8.586	Theta star (bias corrected MLE)	10.13
nu hat (MLE)	253.4	nu star (bias corrected)	214.8
MLE Mean (bias corrected)	57.26	MLE Sd (bias corrected)	24.09
		Approximate Chi Square Value (0.05)	181.8
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	179.2

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50) 67.63      95% Adjusted Gamma UCL (use when n<50) 68.63

**Lognormal GOF Test**

Shapiro Wilk Test Statistic 0.69  
 5% Shapiro Wilk Critical Value 0.901  
 Lilliefors Test Statistic 0.3  
 5% Lilliefors Critical Value 0.197

**Shapiro Wilk Lognormal GOF Test**

Data Not Lognormal at 5% Significance Level

**Lilliefors Lognormal GOF Test**

Data Not Lognormal at 5% Significance Level

**Data Not Lognormal at 5% Significance Level**



**Lognormal Statistics**

Minimum of Logged Data	3.584	Mean of logged Data	3.971
Maximum of Logged Data	5.193	SD of logged Data	0.347

**Assuming Lognormal Distribution**

95% H-UCL	65.69	90% Chebyshev (MVUE) UCL	69.79
95% Chebyshev (MVUE) UCL	75.97	97.5% Chebyshev (MVUE) UCL	84.56
99% Chebyshev (MVUE) UCL	101.4		

**Nonparametric Distribution Free UCL Statistics**  
**Data do not follow a Discernible Distribution (0.05)**

**Nonparametric Distribution Free UCLs**

95% CLT UCL	69.16	95% Jackknife UCL	69.81
95% Standard Bootstrap UCL	68.95	95% Bootstrap-t UCL	106.7
95% Hall's Bootstrap UCL	125.8	95% Percentile Bootstrap UCL	70.58
95% BCA Bootstrap UCL	77.84		
90% Chebyshev(Mean, Sd) UCL	78.97	95% Chebyshev(Mean, Sd) UCL	88.8
97.5% Chebyshev(Mean, Sd) UCL	102.4	99% Chebyshev(Mean, Sd) UCL	129.2

**Suggested UCL to Use**

95% Student's-t UCL	69.81	or 95% Modified-t UCL	70.82
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Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

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

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

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

**Nickel**

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	107	Mean	140
Maximum	210	Median	134
SD	23.09	Std. Error of Mean	5.298
Coefficient of Variation	0.165	Skewness	1.441

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.888
5% Shapiro Wilk Critical Value	0.901
Lilliefors Test Statistic	0.141
5% Lilliefors Critical Value	0.197

**Shapiro Wilk GOF Test**

Data Not Normal at 5% Significance Level

**Lilliefors GOF Test**

Data appear Normal at 5% Significance Level

**Data appear Approximate Normal at 5% Significance Level**

**Assuming Normal Distribution**

**95% Normal UCL**

95% Student's-t UCL	149.2
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**95% UCLs (Adjusted for Skewness)**

95% Adjusted-CLT UCL (Chen-1995)	150.6
95% Modified-t UCL (Johnson-1978)	149.5

**Gamma GOF Test**

A-D Test Statistic	0.418
5% A-D Critical Value	0.74
K-S Test Statistic	0.12
5% K-S Critical Value	0.198

**Anderson-Darling Gamma GOF Test**

Detected data appear Gamma Distributed at 5% Significance Level

**Kolmogorov-Smirnov Gamma GOF Test**

Detected data appear Gamma Distributed at 5% Significance Level

**Detected data appear Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

k hat (MLE)	42.69	k star (bias corrected MLE)	35.98
Theta hat (MLE)	3.28	Theta star (bias corrected MLE)	3.891
nu hat (MLE)	1622	nu star (bias corrected)	1367
MLE Mean (bias corrected)	140	MLE Sd (bias corrected)	23.34
		Approximate Chi Square Value (0.05)	1283
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	1275

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	149.3	95% Adjusted Gamma UCL (use when n<50)	150.1
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.943	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.121	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.197	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	4.673	Mean of logged Data	4.93
Maximum of Logged Data	5.347	SD of logged Data	0.155

**Assuming Lognormal Distribution**

95% H-UCL	149.3	90% Chebyshev (MVUE) UCL	154.9
95% Chebyshev (MVUE) UCL	161.6	97.5% Chebyshev (MVUE) UCL	171
99% Chebyshev (MVUE) UCL	189.5		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	148.7	95% Jackknife UCL	149.2
95% Standard Bootstrap UCL	148.3	95% Bootstrap-t UCL	150.4
95% Hall's Bootstrap UCL	157.6	95% Percentile Bootstrap UCL	148.6
95% BCA Bootstrap UCL	150.1		
90% Chebyshev(Mean, Sd) UCL	155.9	95% Chebyshev(Mean, Sd) UCL	163.1
97.5% Chebyshev(Mean, Sd) UCL	173.1	99% Chebyshev(Mean, Sd) UCL	192.7

**Suggested UCL to Use**

95% Student's-t UCL	149.2
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When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

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

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

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

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

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

# TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	E01.0220220606090304_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

<b>Company</b>	AGON Environmental - Tunnel Spoil Testing	<b>Project No</b>	JC0927	<b>Project Manager</b>	Craig Trimbur	<b>Sampler(s)</b>	Martha - Agon
<b>Address</b>	Unit H76, 63-65 Turner St, Port Melbourne VIC 3207	<b>Project Name</b>	WGTP-Tunnel Ref: 2022052404809-Eurofin-56	<b>EDD Format</b>	Esdat	<b>Handed over by</b>	D BARNETT
<b>Contact Name</b>	Craig Trimbur David Lawson	<b>Analysis</b>	Spot Sample Preparation Metals (As, Cd, Cr, Cu, Ni, Pb, Ag, Hg, Se, Mo, Sn, Zn) (Chel/DM Total) PFAS Extended Suite - C1, 5ug/Lg ASLP PH 5 - PFAS 0.01-0.05 ug/l ASLP Pesticide - PFAS 0.01-0.05ug/l				
<b>Phone No</b>	+61 400 826 807 (Craig) +61 498 411 004 (David)	<b>Special Directions</b>	*Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with other sample receipt documentation.				
<b>Purchase Order</b>		<b>Quote ID No</b>	Agon WGTP TST				
<b>Email for Invoice</b>	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au						
<b>Email for Results</b>	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@sigite-analytics.com.au						
<b>Containers</b>	500mL Plastic 200mL Plastic 150mL Plastic 200mL Amber Glass 40mL VOA vial 500mL PFAS Bottle Jar (Glass or HDPE)						
<b>Required Turnaround Time (TAT)</b>	*TAT will be 2 days if not specified <input type="checkbox"/> Overnight (reporting by 9am)* <input type="checkbox"/> Same day* <input type="checkbox"/> 2 days* <input checked="" type="checkbox"/> 5 days (Standard) <input type="checkbox"/> Other						
<b>Sample Comments / Dangerous Goods Hazard Warning</b>							

No	Client Sample ID	Sampled Date/Time	Matrix	Metals	PFAS	ASLP	Pesticide	Other	TAT
1	SX_IB_20220524_08_08_SS_Triplicate_EUF	24.05.2022 08:08	S	X	X	X	X	X	1
2	SX_OB_20220524_08_09_SS_Primary_EUF	24.05.2022 08:09	S	X	X	X	X	X	1
3	SX_OB_20220524_12_02_SS_Primary_EUF	24.05.2022 12:02	S	X	X	X	X	X	1
4	SX_IB_20220524_12_11_SS_Primary_EUF	24.05.2022 12:11	S	X	X	X	X	X	1
5	SX_OB_20220524_16_08_SS_Primary_EUF	24.05.2022 16:08	S	X	X	X	X	X	1
6	SX_OB_20220524_16_08_SS_Duplicate_EUF	24.05.2022 16:08	S	X	X	X	X	X	1
7	SX_OB_20220524_16_27_SR_Rinsate_EUF	24.05.2022 16:27	W		X				1
8	SX_OB_20220624_16_28_SB_Blank_EUF	24.05.2022 16:28	W		X				1
9	SX_OB_20220624_19_59_SS_Primary_EUF	24.05.2022 19:59	S	X	X	X	X	X	1
10	SX_OB_20220624_19_59_SS_Duplicate_EUF	24.05.2022 19:59	S	X	X	X	X	X	1
11	SX_IB_20220524_20_03_SS_Primary_EUF	24.05.2022 20:03	S	X	X	X	X	X	1
12	SX_OB_20220525_00_03_SS_Primary_EUF	25.05.2022 00:03	S	X	X	X	X	X	1
13	SX_OB_20220525_04_00_SS_Primary_EUF	25.05.2022 04:00	S	X	X	X	X	X	1
14	SX_IB_20220525_04_11_SS_Primary_EUF	25.05.2022 04:11	S	X	X	X	X	X	1
15									1
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									

<b>Method of Shipment</b>	<input checked="" type="checkbox"/> Courier (R)	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Postal	<b>Name</b>	<b>Signature</b>	<b>Date</b>	<b>Time</b>
<b>Received By</b>	Jake				[Signature]	25/5	11:20
<b>Temperature</b>							12.0
<b>Report No</b>							

891520

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 **891520-L**  
Project name **20220525044909-Eurofin-56**  
Project ID **JC0927**  
Received Date **May 25, 2022**

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_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- My0060329	M22- My0060330	M22- My0060331	M22- My0060332
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.1	5.2	5.2	5.4
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	103	102	94	88
13C5-PFPeA (surr.)	1	%	91	85	60	67
13C5-PFHxA (surr.)	1	%	111	63	61	96
13C4-PFHpA (surr.)	1	%	118	112	103	96
13C8-PFOA (surr.)	1	%	159	106	106	107
13C5-PFNA (surr.)	1	%	131	113	107	97
13C6-PFDA (surr.)	1	%	129	73	76	70
13C2-PFUnDA (surr.)	1	%	129	98	82	95
13C2-PFDoDA (surr.)	1	%	119	88	79	69
13C2-PFTTeDA (surr.)	1	%	112	82	66	69

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_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- My0060329	M22- My0060330	M22- My0060331	M22- My0060332
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	98	70	55	42
D3-N-MeFOSA (surr.)	1	%	128	155	82	58
D5-N-EtFOSA (surr.)	1	%	148	175	115	85
D7-N-MeFOSE (surr.)	1	%	103	103	81	107
D9-N-EtFOSE (surr.)	1	%	109	114	100	80
D5-N-EtFOSAA (surr.)	1	%	120	108	94	90
D3-N-MeFOSAA (surr.)	1	%	108	26	77	59
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	130	75	82	117
18O2-PFHxS (surr.)	1	%	126	109	107	122
13C8-PFOS (surr.)	1	%	117	104	112	81
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	105	152	126	143
13C2-6:2 FTSA (surr.)	1	%	145	69	61	98
13C2-8:2 FTSA (surr.)	1	%	91	63	73	58
13C2-10:2 FTSA (surr.)	1	%	87	105	37	114
<b>PFASs Summations</b>						
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 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- My0060333	M22- My0060334	M22- My0060335	M22- My0060336
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.3	5.1	5.1	5.1
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	94	92	101	117
13C5-PFPeA (surr.)	1	%	67	119	73	75
13C5-PFHxA (surr.)	1	%	70	58	55	61
13C4-PFHpA (surr.)	1	%	88	122	108	137
13C8-PFOA (surr.)	1	%	113	139	127	142
13C5-PFNA (surr.)	1	%	97	108	148	149
13C6-PFDA (surr.)	1	%	89	101	154	84
13C2-PFUnDA (surr.)	1	%	80	108	123	130
13C2-PFDoDA (surr.)	1	%	84	133	118	150
13C2-PFTTeDA (surr.)	1	%	66	113	104	165
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	64	100	81	112
D3-N-MeFOSA (surr.)	1	%	124	107	108	165
D5-N-EtFOSA (surr.)	1	%	143	125	118	130
D7-N-MeFOSE (surr.)	1	%	106	147	85	94
D9-N-EtFOSE (surr.)	1	%	105	151	144	126
D5-N-EtFOSAA (surr.)	1	%	95	113	117	179
D3-N-MeFOSAA (surr.)	1	%	74	98	93	142

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- My0060333	M22- My0060334	M22- My0060335	M22- My0060336
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	89	103	95	97
18O2-PFHxS (surr.)	1	%	106	119	122	137
13C8-PFOS (surr.)	1	%	109	105	128	145
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	109	114	115	117
13C2-6:2 FTSA (surr.)	1	%	58	114	120	150
13C2-8:2 FTSA (surr.)	1	%	74	73	72	121
13C2-10:2 FTSA (surr.)	1	%	90	102	145	173
<b>PFASs Summations</b>						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_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- My0060337	M22- My0060338	M22- My0060339	M22- My0060340
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.2	5.1	5.1	5.2



Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_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- My0060337	M22- My0060338	M22- My0060339	M22- My0060340
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	73	104	103	99
13C5-PFPeA (surr.)	1	%	64	79	84	86
13C5-PFHxA (surr.)	1	%	72	73	61	100
13C4-PFHpA (surr.)	1	%	67	100	104	126
13C8-PFOA (surr.)	1	%	61	109	124	133
13C5-PFNA (surr.)	1	%	73	123	115	126
13C6-PFDA (surr.)	1	%	47	155	123	86
13C2-PFUnDA (surr.)	1	%	44	91	113	129
13C2-PFDoDA (surr.)	1	%	68	97	106	138
13C2-PFTTeDA (surr.)	1	%	76	108	126	134
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	70	71	87	107
D3-N-MeFOSA (surr.)	1	%	117	72	124	133
D5-N-EtFOSA (surr.)	1	%	125	90	136	159
D7-N-MeFOSE (surr.)	1	%	62	121	157	93
D9-N-EtFOSE (surr.)	1	%	55	115	152	113
D5-N-EtFOSAA (surr.)	1	%	72	80	120	137
D3-N-MeFOSAA (surr.)	1	%	73	93	87	121
<b>Perfluoroalkyl sulfonic acids (PFSAs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_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- My0060337	M22- My0060338	M22- My0060339	M22- My0060340
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	87	112	84	126
18O2-PFHxS (surr.)	1	%	76	108	114	123
13C8-PFOS (surr.)	1	%	63	107	107	123
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	99	86	121	128
13C2-6:2 FTSA (surr.)	1	%	87	96	78	117
13C2-8:2 FTSA (surr.)	1	%	93	59	68	85
13C2-10:2 FTSA (surr.)	1	%	124	78	129	155
<b>PFASs Summations</b>						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_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- My0060341	M22- My0060342	M22- My0060343	M22- My0060344
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	5.9	6.3	6.3	6.3
pH (off)	0.1	pH Units	8.9	5.1	5.0	5.0
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_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- My0060341	M22- My0060342	M22- My0060343	M22- My0060344
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	93	57	83	56
13C5-PFPeA (surr.)	1	%	77	71	61	66
13C5-PFHxA (surr.)	1	%	102	75	58	74
13C4-PFHpA (surr.)	1	%	108	71	85	63
13C8-PFOA (surr.)	1	%	99	73	116	59
13C5-PFNA (surr.)	1	%	112	67	97	68
13C6-PFDA (surr.)	1	%	37	52	156	62
13C2-PFUnDA (surr.)	1	%	83	60	63	56
13C2-PFDoDA (surr.)	1	%	78	82	77	73
13C2-PFTeDA (surr.)	1	%	74	71	67	68
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	88	81	73	80
D3-N-MeFOSA (surr.)	1	%	76	77	89	114
D5-N-EtFOSA (surr.)	1	%	87	93	125	102
D7-N-MeFOSE (surr.)	1	%	103	88	46	97
D9-N-EtFOSE (surr.)	1	%	93	98	85	97
D5-N-EtFOSAA (surr.)	1	%	112	81	91	71
D3-N-MeFOSAA (surr.)	1	%	91	68	74	84
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	123	55	70	69
18O2-PFHxS (surr.)	1	%	105	80	94	50
13C8-PFOS (surr.)	1	%	112	75	80	71

<b>Client Sample ID</b>			<b>SX_IB_202205 24_08_06_SS TRIPLICATE_E UF</b>	<b>SX_OB_20220 524_08_09_SS PRIMARY_EU F</b>	<b>SX_OB_20220 524_12_02_SS PRIMARY_EU F</b>	<b>SX_IB_202205 24_12_11_SS PRIMARY_EUF</b>
<b>Sample Matrix</b>			<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>
<b>Eurofins Sample No.</b>			<b>M22- My0060341</b>	<b>M22- My0060342</b>	<b>M22- My0060343</b>	<b>M22- My0060344</b>
<b>Date Sampled</b>			<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	170	114	98	127
13C2-6:2 FTSA (surr.)	1	%	82	67	66	61
13C2-8:2 FTSA (surr.)	1	%	86	52	64	59
13C2-10:2 FTSA (surr.)	1	%	54	63	117	66
<b>PFASs Summations</b>						
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

<b>Client Sample ID</b>			<b>SX_OB_20220 524_16_08_SS PRIMARY_EU F</b>	<b>SX_OB_20220 524_16_08_SS DUPLICATE_ EUF</b>	<b>SX_OB_20220 524_19_59_SS PRIMARY_EU F</b>	<b>SX_OB_20220 524_19_59_SS DUPLICATE_ EUF</b>
<b>Sample Matrix</b>			<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>	<b>AUS Leachate - Reagent Water</b>
<b>Eurofins Sample No.</b>			<b>M22- My0060345</b>	<b>M22- My0060346</b>	<b>M22- My0060347</b>	<b>M22- My0060348</b>
<b>Date Sampled</b>			<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.3	6.3	5.9	5.9
pH (off)	0.1	pH Units	5.6	5.7	8.8	8.6
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	86	102	94	97

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0060345	M22- My0060346	M22- My0060347	M22- My0060348
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C5-PFPeA (surr.)	1	%	78	87	85	76
13C5-PFHxA (surr.)	1	%	65	65	71	69
13C4-PFHpA (surr.)	1	%	85	119	106	120
13C8-PFOA (surr.)	1	%	81	118	114	121
13C5-PFNA (surr.)	1	%	79	105	103	122
13C6-PFDA (surr.)	1	%	105	105	94	107
13C2-PFUnDA (surr.)	1	%	75	86	84	111
13C2-PFDoDA (surr.)	1	%	78	99	77	80
13C2-PFTeDA (surr.)	1	%	70	84	69	72
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	62	87	85	88
D3-N-MeFOSA (surr.)	1	%	111	133	81	106
D5-N-EtFOSA (surr.)	1	%	127	161	98	134
D7-N-MeFOSE (surr.)	1	%	97	136	102	119
D9-N-EtFOSE (surr.)	1	%	88	121	99	110
D5-N-EtFOSAA (surr.)	1	%	107	128	108	110
D3-N-MeFOSAA (surr.)	1	%	42	85	39	104
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	87	90	83	84
18O2-PFHxS (surr.)	1	%	93	112	64	141
13C8-PFOS (surr.)	1	%	84	102	97	102

<b>Client Sample ID</b>			<b>SX_OB_20220</b> <b>524_16_08_SS</b> <b>PRIMARY_EU</b> <b>F</b>	<b>SX_OB_20220</b> <b>524_16_08_SS</b> <b>DUPLICATE_</b> <b>EUF</b>	<b>SX_OB_20220</b> <b>524_19_59_SS</b> <b>PRIMARY_EU</b> <b>F</b>	<b>SX_OB_20220</b> <b>524_19_59_SS</b> <b>DUPLICATE_</b> <b>EUF</b>
<b>Sample Matrix</b>			<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>
<b>Eurofins Sample No.</b>			<b>M22-</b> <b>My0060345</b>	<b>M22-</b> <b>My0060346</b>	<b>M22-</b> <b>My0060347</b>	<b>M22-</b> <b>My0060348</b>
<b>Date Sampled</b>			<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>	<b>May 24, 2022</b>
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	76	138	118	140
13C2-6:2 FTSA (surr.)	1	%	58	78	98	78
13C2-8:2 FTSA (surr.)	1	%	71	73	69	74
13C2-10:2 FTSA (surr.)	1	%	77	86	80	104
<b>PFASs Summations</b>						
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

<b>Client Sample ID</b>			<b>SX_IB_202205</b> <b>24_20_03_SS</b> <b>PRIMARY_EUF</b> <b>F</b>	<b>SX_OB_20220</b> <b>525_00_03_SS</b> <b>PRIMARY_EU</b> <b>F</b>	<b>SX_OB_20220</b> <b>525_04_00_SS</b> <b>PRIMARY_EU</b> <b>F</b>	<b>SX_IB_202205</b> <b>25_04_11_SS</b> <b>PRIMARY_EUF</b> <b>F</b>
<b>Sample Matrix</b>			<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>	<b>AUS Leachate</b> <b>- Reagent</b> <b>Water</b>
<b>Eurofins Sample No.</b>			<b>M22-</b> <b>My0060349</b>	<b>M22-</b> <b>My0060350</b>	<b>M22-</b> <b>My0060351</b>	<b>M22-</b> <b>My0060352</b>
<b>Date Sampled</b>			<b>May 24, 2022</b>	<b>May 25, 2022</b>	<b>May 25, 2022</b>	<b>May 25, 2022</b>
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	5.9	5.9	5.9	5.9
pH (off)	0.1	pH Units	9.2	8.7	8.7	9.2
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	81	95	81	82

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_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- My0060349	M22- My0060350	M22- My0060351	M22- My0060352
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C5-PFPeA (surr.)	1	%	57	82	76	67
13C5-PFHxA (surr.)	1	%	74	71	68	83
13C4-PFHpA (surr.)	1	%	103	110	88	97
13C8-PFOA (surr.)	1	%	117	109	89	102
13C5-PFNA (surr.)	1	%	107	100	101	91
13C6-PFDA (surr.)	1	%	120	90	18	125
13C2-PFUnDA (surr.)	1	%	78	69	22	89
13C2-PFDoDA (surr.)	1	%	84	89	78	85
13C2-PFTeDA (surr.)	1	%	92	69	67	70
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	79	89	75	87
D3-N-MeFOSA (surr.)	1	%	113	103	108	96
D5-N-EtFOSA (surr.)	1	%	129	108	159	117
D7-N-MeFOSE (surr.)	1	%	122	109	103	100
D9-N-EtFOSE (surr.)	1	%	99	100	84	94
D5-N-EtFOSAA (surr.)	1	%	113	39	82	101
D3-N-MeFOSAA (surr.)	1	%	104	75	33	101
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	96	86	85	105
18O2-PFHxS (surr.)	1	%	97	114	90	85
13C8-PFOS (surr.)	1	%	83	84	95	91

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_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- My0060349	M22- My0060350	M22- My0060351	M22- My0060352
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	164	110	121	129
13C2-6:2 FTSA (surr.)	1	%	120	70	54	78
13C2-8:2 FTSA (surr.)	1	%	75	67	52	84
13C2-10:2 FTSA (surr.)	1	%	82	62	54	143
<b>PFASs Summations</b>						
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 26, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 26, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 26, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	

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<b>Project Name:</b>	20220525044909-Eurofin-56	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	Soil	M22-My0060315		X	X	X
2	SX_OB_20220524_08_09_S_S_PRIMARY_EUF	May 24, 2022	8:09AM	Soil	M22-My0060316		X	X	X
3	SX_OB_20220524_12_02_S_S_PRIMARY_EUF	May 24, 2022	12:02PM	Soil	M22-My0060317		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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
4	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	Soil	M22-My0060318		X	X	X
5	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	Soil	M22-My0060319		X	X	X
6	SX_OB_20220524_16_08_SS_DUPLICAT_E_EUF	May 24, 2022	4:27PM	Soil	M22-My0060320		X	X	X
7	SX_OB_20220524_16_27_S	May 24, 2022	4:27PM	Water	M22-My0060321			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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	R_RINSATE_EUF								
8	SX_OB_20220524_16_28_S_B_BLANK_EUF	May 24, 2022	4:28PM	Water	M22-My0060322			X	
9	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	Soil	M22-My0060323		X	X	X
10	SX_OB_20220524_19_59_S_S_DUPLICAT E_EUF	May 24, 2022	7:59PM	Soil	M22-My0060324		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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
11	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	Soil	M22-My0060325		X	X	X
12	SX_OB_20220525_00_03_SS_PRIMARY_EUF	May 25, 2022	12:03AM	Soil	M22-My0060326		X	X	X
13	SX_OB_20220525_04_00_SS_PRIMARY_EUF	May 25, 2022	4:00AM	Soil	M22-My0060327		X	X	X
14	SX_IB_20220525_04_11_SS	May 25, 2022	4:11AM	Soil	M22-My0060328		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF								
15	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - pH 5.0	M22-My0060329	X		X	
16	SX_OB_20220524_08_09_SS_PRIMARY_EUF	May 24, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0060330	X		X	
17	SX_OB_20220524_12_02_SS_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - pH 5.0	M22-My0060331	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
18	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - pH 5.0	M22-My0060332	X		X	
19	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0060333	X		X	
20	SX_OB_20220524_16_08_SS_DUPLICAT E_EUF	May 24, 2022	4:27PM	AUS Leachate - pH 5.0	M22-My0060334	X		X	
21	SX_OB_20220524_19_59_S	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060335	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF								
22	SX_OB_20220524_19_59_S_S_DUPLICATED_EUF	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060336	X		X	
23	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0060337	X		X	
24	SX_OB_20220525_00_03_S_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - pH 5.0	M22-My0060338	X		X	



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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
25	SX_OB_20220525_04_00_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - pH 5.0	M22-My0060339	X		X	
26	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0060340	X		X	
27	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - Reagent Water	M22-My0060341	X		X	
28	SX_OB_20220524_08_09_S	May 24, 2022	8:09AM	AUS Leachate - Reagent	M22-My0060342	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF			Water					
29	SX_OB_20220524_12_02_S_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - Reagent Water	M22-My0060343	X	X		
30	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - Reagent Water	M22-My0060344	X	X		
31	SX_OB_20220524_16_08_S_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - Reagent Water	M22-My0060345	X	X		

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
32	SX_OB_20220524_16_08_S_S_DUPLICAT_E_EUF	May 24, 2022	4:27PM	AUS Leachate - Reagent Water	M22-My0060346	X		X	
33	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060347	X		X	
34	SX_OB_20220524_19_59_S_S_DUPLICAT_E_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060348	X		X	
35	SX_IB_20220524_20_03_SS	May 24, 2022	8:03PM	AUS Leachate - Reagent	M22-My0060349	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF			Water					
36	SX_OB_20220525_00_03_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - Reagent Water	M22-My0060350	X	X		
37	SX_OB_20220525_04_00_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0060351	X	X		
38	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0060352	X	X		

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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	Agon Lab Reports (Spoil Project)

**Eurofins Analytical Services Manager : Michael Cassidy**

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IMRG 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				
<b>Test Counts</b>	24	12	38	12

## 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

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

### Terms

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	107		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	135		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	81		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	90		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	97		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	72		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	102		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	91		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	93		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	80		50-150	Pass	

Test		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
<b>LCS - % Recovery</b>									
<b>Perfluoroalkyl sulfonamido substances</b>									
Perfluorooctane sulfonamide (FOSA)		%	71			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)		%	91			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)		%	95			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)		%	118			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)		%	75			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)		%	132			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)		%	56			50-150	Pass		
<b>LCS - % Recovery</b>									
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>									
Perfluorobutanesulfonic acid (PFBS)		%	61			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)		%	61			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)		%	70			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)		%	93			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)		%	103			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)		%	90			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)		%	77			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)		%	64			50-150	Pass		
<b>LCS - % Recovery</b>									
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)		%	81			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)		%	61			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)		%	122			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)		%	85			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>									
				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
<b>Duplicate</b>									
<b>Perfluoroalkyl sulfonamido substances</b>									
				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	



<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonic acids (PFSAs)</b>				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
<b>Duplicate</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0060338	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0060338	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
<b>Duplicate</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0060344	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0060344	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
<b>Duplicate</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0060351	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0060351	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0060351	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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Agon Environmental Pty Ltd - VIC  
3/224 Glen Osmond Road  
Fullarton  
SA 5063



NATA Accredited  
Accreditation Number 1261  
Site Number 1254

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NATA is a signatory to the ILAC Mutual Recognition  
Arrangement for the mutual recognition of the  
equivalence of testing, medical testing, calibration,  
inspection, proficiency testing scheme providers and  
reference materials producers reports and certificates.

Attention: **David Lawson**

Report **891520-S**  
Project name **20220525044909-Eurofin-56**  
Project ID **JC0927**  
Received Date **May 25, 2022**

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
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_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Volatile Organics</b>						
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	55	63	55
Toluene-d8 (surr.)	1	%	66	51	61	58
<b>Polycyclic Aromatic Hydrocarbons</b>						
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_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	%	98	56	64	64
p-Terphenyl-d14 (surr.)	1	%	85	95	103	94
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	76	64	52	74
Tetrachloro-m-xylene (surr.)	1	%	85	81	79	63

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Polychlorinated Biphenyls</b>						
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	%	76	64	52	74
Tetrachloro-m-xylene (surr.)	1	%	85	81	79	63
<b>Phenols (Halogenated)</b>						
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
<b>Phenols (non-Halogenated)</b>						
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	%	102	59	67	74
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
<b>Cyanide (total)</b>						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
<b>Fluoride (Total)</b>						
Fluoride (Total)	100	mg/kg	130	200	< 100	< 100
<b>pH (1:5 Aqueous extract at 25°C as rec.)</b>						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9	6.6	6.5	6.8
<b>% Moisture</b>						
% Moisture	1	%	29	30	33	27
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	28	52	55	18
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	180	140	150	160
Copper	5	mg/kg	92	68	61	77
Lead	5	mg/kg	< 5	< 5	5.1	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1



Client Sample ID			SX_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	260	170	170	240
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	170	110	110	120
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	132	66	119	73
13C5-PFPeA (surr.)	1	%	131	69	122	75
13C5-PFHxA (surr.)	1	%	142	69	123	79
13C4-PFHpA (surr.)	1	%	142	69	129	78
13C8-PFOA (surr.)	1	%	130	83	137	81
13C5-PFNA (surr.)	1	%	138	55	140	84
13C6-PFDA (surr.)	1	%	144	73	116	89
13C2-PFUnDA (surr.)	1	%	136	111	123	92
13C2-PFDoDA (surr.)	1	%	132	61	132	81
13C2-PFTeDA (surr.)	1	%	135	88	110	78
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	114	107	125	97
D3-N-MeFOSA (surr.)	1	%	133	86	134	116
D5-N-EtFOSA (surr.)	1	%	98	87	137	107
D7-N-MeFOSE (surr.)	1	%	130	83	133	71
D9-N-EtFOSE (surr.)	1	%	138	59	138	78
D5-N-EtFOSAA (surr.)	1	%	125	93	148	95
D3-N-MeFOSAA (surr.)	1	%	135	59	110	101

Client Sample ID			SX_IB_202205 24_08_06_SS TRIPPLICATE_E UF	SX_OB_20220 524_08_09_SS PRIMARY_EU F	SX_OB_20220 524_12_02_SS PRIMARY_EU F	SX_IB_202205 24_12_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060315	M22- My0060316	M22- My0060317	M22- My0060318
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	127	78	136	81
18O2-PFHxS (surr.)	1	%	126	75	129	79
13C8-PFOS (surr.)	1	%	130	51	126	76
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	136	48	125	88
13C2-6:2 FTSA (surr.)	1	%	134	51	128	77
13C2-8:2 FTSA (surr.)	1	%	122	100	127	113
13C2-10:2 FTSA (surr.)	1	%	125	70	133	117
<b>PFASs Summations</b>						
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 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
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 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Volatiles Organics</b>						
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	%	55	69	111	62
Toluene-d8 (surr.)	1	%	51	56	107	65
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	%	65	54	60	92
p-Terphenyl-d14 (surr.)	1	%	94	96	142	147

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	0.2	< 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	0.07	< 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	0.10	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	0.07	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	0.12	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	0.07	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	0.09	< 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	0.08	< 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	0.17	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	0.07	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	0.8	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	0.56	< 0.1
Dibutylchloroendate (surr.)	1	%	82	53	99	63
Tetrachloro-m-xylene (surr.)	1	%	71	78	66	146
<b>Polychlorinated Biphenyls</b>						
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	%	82	53	99	63
Tetrachloro-m-xylene (surr.)	1	%	71	78	66	146
<b>Phenols (Halogenated)</b>						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Phenols (non-Halogenated)</b>						
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	%	72	64	41	93
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
<b>Cyanide (total)</b>						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
<b>Fluoride (Total)</b>						
Fluoride (Total)	100	mg/kg	< 100	200	< 100	< 100
<b>pH (1:5 Aqueous extract at 25°C as rec.)</b>						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	6.4	6.5	6.3	8.2
<b>% Moisture</b>						
% Moisture	1	%	32	32	34	34
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	65	64	55	42
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	150	150	120	180
Copper	5	mg/kg	70	74	53	63
Lead	5	mg/kg	5.0	5.2	5.4	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	180	220	130	150
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	110	140	96	78
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	76	76	77	135
13C5-PFPeA (surr.)	1	%	81	82	79	134
13C5-PFHxA (surr.)	1	%	81	82	80	145

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
Date Sampled			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C4-PFHpA (surr.)	1	%	81	81	80	141
13C8-PFOA (surr.)	1	%	82	83	86	132
13C5-PFNA (surr.)	1	%	90	83	87	138
13C6-PFDA (surr.)	1	%	96	56	94	143
13C2-PFUnDA (surr.)	1	%	94	90	93	137
13C2-PFDoDA (surr.)	1	%	85	104	85	133
13C2-PFTeDA (surr.)	1	%	84	101	80	137
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	98	134	100	116
D3-N-MeFOSA (surr.)	1	%	122	118	118	138
D5-N-EtFOSA (surr.)	1	%	115	101	114	100
D7-N-MeFOSE (surr.)	1	%	78	80	79	138
D9-N-EtFOSE (surr.)	1	%	80	74	81	143
D5-N-EtFOSAA (surr.)	1	%	95	107	96	130
D3-N-MeFOSAA (surr.)	1	%	98	81	102	142
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	81	83	78	138
18O2-PFHxS (surr.)	1	%	81	82	80	130
13C8-PFOS (surr.)	1	%	78	94	85	136
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	82	58	85	137
13C2-6:2 FTSA (surr.)	1	%	81	63	83	128

Client Sample ID			SX_OB_20220 524_16_08_SS PRIMARY_EU F	SX_OB_20220 524_16_08_SS DUPLICATE_ EUF	SX_OB_20220 524_19_59_SS PRIMARY_EU F	SX_OB_20220 524_19_59_SS DUPLICATE_ EUF
<b>Sample Matrix</b>			Soil	Soil	Soil	Soil
<b>Eurofins Sample No.</b>			M22- My0060319	M22- My0060320	M22- My0060323	M22- My0060324
<b>Date Sampled</b>			May 24, 2022	May 24, 2022	May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
13C2-8:2 FTSA (surr.)	1	%	129	106	122	129
13C2-10:2 FTSA (surr.)	1	%	115	72	116	128
<b>PFASs Summations</b>						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
<b>Sample Matrix</b>			Soil	Soil	Soil	Soil
<b>Eurofins Sample No.</b>			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
<b>Date Sampled</b>			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5



Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	64	56	59	67
Toluene-d8 (surr.)	1	%	69	53	54	64

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	75	104	66
p-Terphenyl-d14 (surr.)	1	%	146	135	53	128
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	70	64	70	126
Tetrachloro-m-xylene (surr.)	1	%	146	128	85	132
<b>Polychlorinated Biphenyls</b>						
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	%	70	64	70	126
Tetrachloro-m-xylene (surr.)	1	%	146	128	85	132
<b>Phenols (Halogenated)</b>						
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
<b>Phenols (non-Halogenated)</b>						
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	%	88	74	82	102
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
<b>Cyanide (total)</b>						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
<b>Fluoride (Total)</b>						
Fluoride (Total)	100	mg/kg	430	340	< 100	< 100
<b>pH (1:5 Aqueous extract at 25°C as rec.)</b>						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.2	6.4	8.3	8.2
<b>% Moisture</b>						
% Moisture	1	%	30	32	31	29

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	90	87	54	40
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	180	170	150	120
Copper	5	mg/kg	82	79	59	63
Lead	5	mg/kg	6.6	6.0	6.0	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	270	210	150	200
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	170	140	110	130
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTeDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	126	130	131	69
13C5-PFPeA (surr.)	1	%	124	132	131	75
13C5-PFHxA (surr.)	1	%	132	140	136	77
13C4-PFHpA (surr.)	1	%	130	139	139	73
13C8-PFOA (surr.)	1	%	129	124	127	69
13C5-PFNA (surr.)	1	%	130	138	131	82
13C6-PFDA (surr.)	1	%	135	142	145	52
13C2-PFUnDA (surr.)	1	%	129	139	140	82
13C2-PFDoDA (surr.)	1	%	123	128	135	61
13C2-PFTeDA (surr.)	1	%	131	133	138	79
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	107	110	114	98

Client Sample ID			SX_IB_202205 24_20_03_SS PRIMARY_EUF	SX_OB_20220 525_00_03_SS PRIMARY_EU F	SX_OB_20220 525_04_00_SS PRIMARY_EU F	SX_IB_202205 25_04_11_SS PRIMARY_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0060325	M22- My0060326	M22- My0060327	M22- My0060328
Date Sampled			May 24, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonamido substances</b>						
D3-N-MeFOSA (surr.)	1	%	132	133	138	64
D5-N-EtFOSA (surr.)	1	%	92	94	101	93
D7-N-MeFOSE (surr.)	1	%	124	126	129	86
D9-N-EtFOSE (surr.)	1	%	130	133	137	68
D5-N-EtFOSAA (surr.)	1	%	119	123	127	103
D3-N-MeFOSAA (surr.)	1	%	141	147	146	93
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	124	129	123	84
18O2-PFHxS (surr.)	1	%	117	126	129	81
13C8-PFOS (surr.)	1	%	125	132	132	88
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	136	133	137	51
13C2-6:2 FTSA (surr.)	1	%	123	135	124	60
13C2-8:2 FTSA (surr.)	1	%	113	116	130	144
13C2-10:2 FTSA (surr.)	1	%	122	116	124	109
<b>PFASs Summations</b>						
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 25, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 25, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 25, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	May 25, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	May 25, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 25, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	May 25, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	May 25, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 25, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 25, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	May 25, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	May 27, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE	Melbourne	May 26, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	May 25, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	May 25, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	May 25, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 25, 2022	

**Company Name:** Agon Environmental Pty Ltd - VIC  
**Address:** 3/224 Glen Osmond Road  
Fullarton  
SA 5063  
  
**Project Name:** 20220525044909-Eurofin-56  
**Project ID:** JC0927

**Order No.:**  
**Report #:** 891520  
**Phone:** 08 8338 1009  
**Fax:**

**Received:** May 25, 2022 11:20 AM  
**Due:** Jun 1, 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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	Soil	M22-My0060315		X	X	X
2	SX_OB_20220524_08_09_SS_PRIMARY_EUF	May 24, 2022	8:09AM	Soil	M22-My0060316		X	X	X
3	SX_OB_20220524_12_02_SS_PRIMARY_EUF	May 24, 2022	12:02PM	Soil	M22-My0060317		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
4	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	Soil	M22-My0060318		X	X	X
5	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	Soil	M22-My0060319		X	X	X
6	SX_OB_20220524_16_08_SS_DUPLICAT E_EUF	May 24, 2022	4:27PM	Soil	M22-My0060320		X	X	X
7	SX_OB_20220524_16_27_S	May 24, 2022	4:27PM	Water	M22-My0060321			X	



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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	R_RINSATE_EUF								
8	SX_OB_20220524_16_28_S_B_BLANK_EUF	May 24, 2022	4:28PM	Water	M22-My0060322			X	
9	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	Soil	M22-My0060323		X	X	X
10	SX_OB_20220524_19_59_S_S_DUPLICAT_EUF	May 24, 2022	7:59PM	Soil	M22-My0060324		X	X	X

**Company Name:** Agon Environmental Pty Ltd - VIC  
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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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
11	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	Soil	M22-My0060325		X	X	X
12	SX_OB_20220525_00_03_SS_PRIMARY_EUF	May 25, 2022	12:03AM	Soil	M22-My0060326		X	X	X
13	SX_OB_20220525_04_00_SS_PRIMARY_EUF	May 25, 2022	4:00AM	Soil	M22-My0060327		X	X	X
14	SX_IB_20220525_04_11_SS	May 25, 2022	4:11AM	Soil	M22-My0060328		X	X	X

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 25, 2022 11:20 AM
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<b>Project Name:</b>	20220525044909-Eurofin-56	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF								
15	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - pH 5.0	M22-My0060329	X		X	
16	SX_OB_20220524_08_09_SS_PRIMARY_EUF	May 24, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0060330	X		X	
17	SX_OB_20220524_12_02_SS_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - pH 5.0	M22-My0060331	X		X	

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<b>Project Name:</b>	20220525044909-Eurofin-56	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
18	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - pH 5.0	M22-My0060332	X		X	
19	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0060333	X		X	
20	SX_OB_20220524_16_08_SS_DUPLICAT E_EUF	May 24, 2022	4:27PM	AUS Leachate - pH 5.0	M22-My0060334	X		X	
21	SX_OB_20220524_19_59_S	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060335	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF								
22	SX_OB_20220524_19_59_S_S_DUPLICATED_EUF	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060336	X		X	
23	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0060337	X		X	
24	SX_OB_20220525_00_03_S_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - pH 5.0	M22-My0060338	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
25	SX_OB_20220525_04_00_S_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - pH 5.0	M22-My0060339	X		X	
26	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0060340	X		X	
27	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - Reagent Water	M22-My0060341	X		X	
28	SX_OB_20220524_08_09_S	May 24, 2022	8:09AM	AUS Leachate - Reagent	M22-My0060342	X		X	

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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF			Water					
29	SX_OB_20220524_12_02_S_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - Reagent Water	M22-My0060343	X		X	
30	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - Reagent Water	M22-My0060344	X		X	
31	SX_OB_20220524_16_08_S_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - Reagent Water	M22-My0060345	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
32	SX_OB_20220524_16_08_S_S_DUPLICAT_E_EUF	May 24, 2022	4:27PM	AUS Leachate - Reagent Water	M22-My0060346	X		X	
33	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060347	X		X	
34	SX_OB_20220524_19_59_S_S_DUPLICAT_E_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060348	X		X	
35	SX_IB_20220524_20_03_SS	May 24, 2022	8:03PM	AUS Leachate - Reagent	M22-My0060349	X		X	



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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF			Water					
36	SX_OB_20220525_00_03_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - Reagent Water	M22-My0060350	X	X		
37	SX_OB_20220525_04_00_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0060351	X	X		
38	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0060352	X	X		

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**Eurofins Analytical Services Manager : Michael Cassidy**

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IMRG 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				
<b>Test Counts</b>	24	12	38	12

**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**

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

**Terms**

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons</b>							
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	
<b>Method Blank</b>							
<b>Volatile Organics</b>							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
<b>Volatile Organics</b>							
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	
<b>Method Blank</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
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	
<b>Method Blank</b>							
<b>Organochlorine Pesticides</b>							
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	
<b>Method Blank</b>							
<b>Polychlorinated Biphenyls</b>							
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	
<b>Method Blank</b>							
<b>Phenols (Halogenated)</b>							
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	
<b>Method Blank</b>							
<b>Phenols (non-Halogenated)</b>							
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	
<b>Method Blank</b>							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFSAs)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Total Recoverable Hydrocarbons</b>						
TRH C6-C9	%	108		70-130	Pass	
TRH C10-C14	%	81		70-130	Pass	
Naphthalene	%	85		70-130	Pass	
TRH C6-C10	%	106		70-130	Pass	
TRH >C10-C16	%	81		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Volatile Organics</b>						
1.1-Dichloroethene	%	124		70-130	Pass	
1.1.1-Trichloroethane	%	116		70-130	Pass	
1.2-Dichlorobenzene	%	105		70-130	Pass	
1.2-Dichloroethane	%	110		70-130	Pass	
Benzene	%	93		70-130	Pass	
Ethylbenzene	%	78		70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	81			70-130	Pass	
Toluene	%	101			70-130	Pass	
Trichloroethene	%	93			70-130	Pass	
Xylenes - Total*	%	82			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	%	102			70-130	Pass	
Acenaphthylene	%	121			70-130	Pass	
Anthracene	%	94			70-130	Pass	
Benz(a)anthracene	%	81			70-130	Pass	
Benzo(a)pyrene	%	107			70-130	Pass	
Benzo(b&i)fluoranthene	%	78			70-130	Pass	
Benzo(g,h,i)perylene	%	86			70-130	Pass	
Benzo(k)fluoranthene	%	105			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a,h)anthracene	%	89			70-130	Pass	
Fluoranthene	%	117			70-130	Pass	
Fluorene	%	107			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	87			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	99			70-130	Pass	
Pyrene	%	121			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Organochlorine Pesticides</b>							
Chlordanes - Total	%	109			70-130	Pass	
4,4'-DDD	%	116			70-130	Pass	
4,4'-DDE	%	126			70-130	Pass	
4,4'-DDT	%	71			70-130	Pass	
a-HCH	%	116			70-130	Pass	
Aldrin	%	118			70-130	Pass	
b-HCH	%	123			70-130	Pass	
d-HCH	%	110			70-130	Pass	
Dieldrin	%	126			70-130	Pass	
Endosulfan I	%	112			70-130	Pass	
Endosulfan II	%	97			70-130	Pass	
Endosulfan sulphate	%	88			70-130	Pass	
Endrin	%	94			70-130	Pass	
Endrin aldehyde	%	106			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-HCH (Lindane)	%	87			70-130	Pass	
Heptachlor	%	110			70-130	Pass	
Heptachlor epoxide	%	118			70-130	Pass	
Hexachlorobenzene	%	101			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Polychlorinated Biphenyls</b>							
Aroclor-1260	%	91			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Phenols (Halogenated)</b>							
2-Chlorophenol	%	94			25-140	Pass	
2,4-Dichlorophenol	%	100			25-140	Pass	
2,4,5-Trichlorophenol	%	93			25-140	Pass	
2,4,6-Trichlorophenol	%	78			25-140	Pass	
2,6-Dichlorophenol	%	80			25-140	Pass	



Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	91		25-140	Pass	
Pentachlorophenol	%	68		25-140	Pass	
Tetrachlorophenols - Total	%	100		25-140	Pass	
<b>LCS - % Recovery</b>						
<b>Phenols (non-Halogenated)</b>						
2-Cyclohexyl-4,6-dinitrophenol	%	35		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	45		25-140	Pass	
2-Nitrophenol	%	71		25-140	Pass	
2,4-Dimethylphenol	%	119		25-140	Pass	
2,4-Dinitrophenol	%	30		25-140	Pass	
2-Methylphenol (o-Cresol)	%	74		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	92		25-140	Pass	
4-Nitrophenol	%	56		25-140	Pass	
Dinoseb	%	60		25-140	Pass	
Phenol	%	98		25-140	Pass	
<b>LCS - % Recovery</b>						
Chromium (hexavalent)	%	88		70-130	Pass	
Cyanide (total)	%	91		70-130	Pass	
Fluoride (Total)	%	105		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Heavy Metals</b>						
Arsenic	%	102		80-120	Pass	
Cadmium	%	97		80-120	Pass	
Chromium	%	108		80-120	Pass	
Copper	%	105		80-120	Pass	
Lead	%	110		80-120	Pass	
Mercury	%	117		80-120	Pass	
Molybdenum	%	102		80-120	Pass	
Nickel	%	103		80-120	Pass	
Selenium	%	95		80-120	Pass	
Silver	%	97		80-120	Pass	
Tin	%	93		80-120	Pass	
Zinc	%	100		80-120	Pass	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	91		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	89		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	90		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	88		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	92		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	90		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	89		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	92		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	72		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	90		50-150	Pass	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA)	%	81		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	91		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	93		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	93		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	89		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	90		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	85			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>								
Perfluorobutanesulfonic acid (PFBS)	%	85			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	85			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	87			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	87			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	89			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	75			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	88			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	81			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	92			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)	%	115			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	94			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>								
<b>Total Recoverable Hydrocarbons</b>				Result 1				
TRH C10-C14	M22-My0046435	NCP	%	100		70-130	Pass	
TRH >C10-C16	M22-My0046435	NCP	%	96		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Organochlorine Pesticides</b>				Result 1				
Chlordanes - Total	M22-My0055296	NCP	%	109		70-130	Pass	
4,4'-DDD	M22-My0055296	NCP	%	119		70-130	Pass	
4,4'-DDE	M22-My0055296	NCP	%	96		70-130	Pass	
4,4'-DDT	M22-My0055296	NCP	%	90		70-130	Pass	
a-HCH	M22-My0055296	NCP	%	128		70-130	Pass	
Aldrin	M22-My0055296	NCP	%	87		70-130	Pass	
b-HCH	M22-My0055296	NCP	%	126		70-130	Pass	
d-HCH	M22-My0055296	NCP	%	112		70-130	Pass	
Dieldrin	M22-My0055296	NCP	%	88		70-130	Pass	
Endosulfan I	M22-My0055296	NCP	%	113		70-130	Pass	
Endosulfan II	M22-My0055296	NCP	%	118		70-130	Pass	
Endosulfan sulphate	M22-My0055296	NCP	%	94		70-130	Pass	
Endrin	M22-My0055296	NCP	%	100		70-130	Pass	
Endrin aldehyde	M22-My0055296	NCP	%	89		70-130	Pass	
Endrin ketone	M22-My0055296	NCP	%	100		70-130	Pass	
g-HCH (Lindane)	M22-My0055296	NCP	%	93		70-130	Pass	
Heptachlor	M22-My0055296	NCP	%	121		70-130	Pass	
Heptachlor epoxide	M22-My0055296	NCP	%	98		70-130	Pass	
Hexachlorobenzene	M22-My0055296	NCP	%	110		70-130	Pass	
Methoxychlor	M22-My0055296	NCP	%	77		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Polychlorinated Biphenyls</b>				Result 1				
Aroclor-1016	M22-My0054849	NCP	%	87		70-130	Pass	
Aroclor-1260	M22-My0054849	NCP	%	110		70-130	Pass	
<b>Spike - % Recovery</b>								
				Result 1				
Fluoride (Total)	M22-My0067311	NCP	%	90		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Heavy Metals</b>				Result 1				
Arsenic	M22-My0059354	NCP	%	78		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Cadmium	M22-My0059354	NCP	%	111		75-125	Pass	
Chromium	M22-My0059354	NCP	%	105		75-125	Pass	
Copper	M22-My0059354	NCP	%	98		75-125	Pass	
Lead	M22-My0059354	NCP	%	119		75-125	Pass	
Mercury	M22-My0059354	NCP	%	109		75-125	Pass	
Molybdenum	M22-My0059354	NCP	%	111		75-125	Pass	
Nickel	M22-My0059354	NCP	%	109		75-125	Pass	
Selenium	M22-My0059354	NCP	%	78		75-125	Pass	
Silver	M22-My0059354	NCP	%	110		75-125	Pass	
Tin	M22-My0059354	NCP	%	105		75-125	Pass	
Zinc	M22-My0059354	NCP	%	112		75-125	Pass	
<b>Spike - % Recovery</b>								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1				
Acenaphthene	M22-My0060316	CP	%	86		70-130	Pass	
Acenaphthylene	M22-My0060316	CP	%	93		70-130	Pass	
Anthracene	M22-My0060316	CP	%	91		70-130	Pass	
Benz(a)anthracene	M22-My0060316	CP	%	79		70-130	Pass	
Benzo(a)pyrene	M22-My0060316	CP	%	84		70-130	Pass	
Benzo(b&j)fluoranthene	M22-My0060316	CP	%	82		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0060316	CP	%	98		70-130	Pass	
Benzo(k)fluoranthene	M22-My0060316	CP	%	82		70-130	Pass	
Chrysene	M22-My0060316	CP	%	81		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0060316	CP	%	75		70-130	Pass	
Fluoranthene	M22-My0060316	CP	%	84		70-130	Pass	
Fluorene	M22-My0060316	CP	%	91		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-My0060316	CP	%	80		70-130	Pass	
Naphthalene	M22-My0060316	CP	%	86		70-130	Pass	
Phenanthrene	M22-My0060316	CP	%	90		70-130	Pass	
Pyrene	M22-My0060316	CP	%	82		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (Halogenated)</b>				Result 1				
2-Chlorophenol	M22-My0060316	CP	%	72		30-130	Pass	
2,4-Dichlorophenol	M22-My0060316	CP	%	85		30-130	Pass	
2,4,5-Trichlorophenol	M22-My0060316	CP	%	81		30-130	Pass	
2,4,6-Trichlorophenol	M22-My0060316	CP	%	77		30-130	Pass	
2,6-Dichlorophenol	M22-My0060316	CP	%	76		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0060316	CP	%	70		30-130	Pass	
Pentachlorophenol	M22-My0060316	CP	%	79		30-130	Pass	
Tetrachlorophenols - Total	M22-My0060316	CP	%	68		30-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (non-Halogenated)</b>				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-My0060316	CP	%	101		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-My0060316	CP	%	83		30-130	Pass	
2-Nitrophenol	M22-My0060316	CP	%	88		30-130	Pass	
2,4-Dimethylphenol	M22-My0060316	CP	%	86		30-130	Pass	
2,4-Dinitrophenol	M22-My0060316	CP	%	56		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-My0060316	CP	%	63		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0060316	CP	%	69		30-130	Pass	
4-Nitrophenol	M22-My0060316	CP	%	100		30-130	Pass	
Dinoseb	M22-My0060316	CP	%	108		30-130	Pass	
Phenol	M22-My0060316	CP	%	69		30-130	Pass	
<b>Spike - % Recovery</b>								
				Result 1				
Chromium (hexavalent)	M22-My0060323	CP	%	110		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Cyanide (total)	M22-My0060323	CP	%	77		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1				
Perfluorobutanoic acid (PFBA)	M22-My0060323	CP	%	116		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0060323	CP	%	119		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0060323	CP	%	114		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0060323	CP	%	110		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0060323	CP	%	118		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0060323	CP	%	115		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0060323	CP	%	118		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0060323	CP	%	124		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0060323	CP	%	120		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0060323	CP	%	89		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0060323	CP	%	120		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-My0060323	CP	%	103		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0060323	CP	%	116		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0060323	CP	%	114		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0060323	CP	%	119		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0060323	CP	%	119		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0060323	CP	%	115		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0060323	CP	%	109		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-My0060323	CP	%	111		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0060323	CP	%	113		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0060323	CP	%	107		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0060323	CP	%	107		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0060323	CP	%	116		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0060323	CP	%	103		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0060323	CP	%	118		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0060323	CP	%	104		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0060323	CP	%	119		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0060323	CP	%	125		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0060323	CP	%	127		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0060323	CP	%	105		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Total Recoverable Hydrocarbons</b>				Result 1				
TRH C6-C9	M22-My0060326	CP	%	76		70-130	Pass	
Naphthalene	M22-My0060326	CP	%	97		70-130	Pass	
TRH C6-C10	M22-My0060326	CP	%	72		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Volatile Organics</b>				Result 1				
1.1-Dichloroethene	M22-My0060326	CP	%	75		70-130	Pass	
1.1.1-Trichloroethane	M22-My0060326	CP	%	79		70-130	Pass	
1.2-Dichlorobenzene	M22-My0060326	CP	%	85		70-130	Pass	
1.2-Dichloroethane	M22-My0060326	CP	%	85		70-130	Pass	
Benzene	M22-My0060326	CP	%	78		70-130	Pass	
Ethylbenzene	M22-My0060326	CP	%	97		70-130	Pass	
m&p-Xylenes	M22-My0060326	CP	%	99		70-130	Pass	
o-Xylene	M22-My0060326	CP	%	77		70-130	Pass	
Toluene	M22-My0060326	CP	%	102		70-130	Pass	
Trichloroethene	M22-My0060326	CP	%	82		70-130	Pass	
Xylenes - Total*	M22-My0060326	CP	%	92		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1				
Acenaphthene	M22-My0060327	CP	%	113		70-130	Pass	
Acenaphthylene	M22-My0060327	CP	%	126		70-130	Pass	
Anthracene	M22-My0060327	CP	%	87		70-130	Pass	
Benz(a)anthracene	M22-My0060327	CP	%	74		70-130	Pass	
Benzo(a)pyrene	M22-My0060327	CP	%	118		70-130	Pass	
Benzo(b&j)fluoranthene	M22-My0060327	CP	%	93		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0060327	CP	%	88		70-130	Pass	
Benzo(k)fluoranthene	M22-My0060327	CP	%	89		70-130	Pass	
Chrysene	M22-My0060327	CP	%	96		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0060327	CP	%	103		70-130	Pass	
Fluoranthene	M22-My0060327	CP	%	119		70-130	Pass	
Fluorene	M22-My0060327	CP	%	118		70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-My0060327	CP	%	99		70-130	Pass	
Naphthalene	M22-My0060327	CP	%	109		70-130	Pass	
Phenanthrene	M22-My0060327	CP	%	114		70-130	Pass	
Pyrene	M22-My0060327	CP	%	120		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (Halogenated)</b>				Result 1				
2-Chlorophenol	M22-My0060327	CP	%	112		30-130	Pass	
2.4-Dichlorophenol	M22-My0060327	CP	%	122		30-130	Pass	
2.4.5-Trichlorophenol	M22-My0060327	CP	%	97		30-130	Pass	
2.4.6-Trichlorophenol	M22-My0060327	CP	%	88		30-130	Pass	
2.6-Dichlorophenol	M22-My0060327	CP	%	95		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0060327	CP	%	103		30-130	Pass	
Pentachlorophenol	M22-My0060327	CP	%	65		30-130	Pass	
Tetrachlorophenols - Total	M22-My0060327	CP	%	114		30-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (non-Halogenated)</b>				Result 1				
2-Nitrophenol	M22-My0060327	CP	%	85		30-130	Pass	
2.4-Dimethylphenol	M22-My0060327	CP	%	122		30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Methylphenol (o-Cresol)	M22-My0060327	CP	%	90			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0060327	CP	%	105			30-130	Pass	
4-Nitrophenol	M22-My0060327	CP	%	68			30-130	Pass	
Dinoseb	M22-My0060327	CP	%	47			30-130	Pass	
Phenol	M22-My0060327	CP	%	111			30-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons</b>				Result 1	Result 2	RPD			
TRH C6-C9	M22-My0060315	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-My0064415	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-My0064415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-My0064415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-My0060315	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-My0064415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-My0064415	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-My0064415	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
<b>Duplicate</b>									
<b>Volatile Organics</b>				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
<b>Duplicate</b>									
<b>Volatile Organics</b>				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-My0060315	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
<b>Volatile Organics</b>				Result 1	Result 2	RPD		
Chloroform	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0060315	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0060315	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0060315	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0060315	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0060315	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0060315	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
<b>Organochlorine Pesticides</b>				Result 1	Result 2	RPD		
Heptachlor epoxide	M22-My0049457	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
<b>Phenols (Halogenated)</b>				Result 1	Result 2	RPD		
2.6-Dichlorophenol	M22-My0049457	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0060315	CP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	M22-My0061650	NCP	mg/kg	< 5	< 5	<1	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M22-My0065940	NCP	pH Units	8.2	8.3	pass	30%	Pass
Duplicate								
<b>Heavy Metals</b>				Result 1	Result 2	RPD		
Arsenic	M22-My0059354	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	M22-My0059354	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M22-My0059354	NCP	mg/kg	150	150	4.0	30%	Pass
Copper	M22-My0059354	NCP	mg/kg	52	53	3.0	30%	Pass
Lead	M22-My0059354	NCP	mg/kg	11	11	4.0	30%	Pass
Mercury	M22-My0059354	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0059354	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0059354	NCP	mg/kg	16	16	4.0	30%	Pass
Selenium	M22-My0059354	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M22-My0059354	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0059354	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0059354	NCP	mg/kg	20	21	2.0	30%	Pass
Duplicate								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1	Result 2	RPD		
Acenaphthene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1	Result 2	RPD		
Benzo(a)pyrene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
<b>Organochlorine Pesticides</b>				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0060316	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
<b>Polychlorinated Biphenyls</b>				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0060316	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
<b>Phenols (Halogenated)</b>				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-My0060316	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-My0060316	CP	mg/kg	< 1	< 1	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0060316	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0060316	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0060316	CP	mg/kg	< 10	< 10	<1	30%	Pass



Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-My0060316	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-My0060316	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0060316	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-My0060316	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0060316	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0060316	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0060316	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0060316	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0060316	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0060316	CP	%	30	32	8.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M22-My0060318	CP	mg/kg	< 20	< 20	<1	30%	Pass
Naphthalene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M22-My0060318	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Hexachlorobutadiene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1,1-Dichloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,4-Trichlorobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1-Dichloroethene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,1-Trichloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,1,2-Tetrachloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,2-Trichloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,2,2-Tetrachloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dibromoethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichlorobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichloropropane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,3-Trichloropropane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,4-Trimethylbenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3-Dichlorobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3-Dichloropropane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3,5-Trimethylbenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,4-Dichlorobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-My0060318	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Chloroethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0060318	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0060318	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0060318	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0060318	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0060318	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0060318	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Fluoride (Total)	M22-My0060319	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0060320	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0060323	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0060323	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0060323	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0060323	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0060326	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0060327	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0060328	CP	%	29	26	11	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
Harry Bacalis	Senior Analyst-Volatile
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-Metal
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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Agon Environmental Pty Ltd - VIC  
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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 **891520-W**  
Project name [20220525044909-Eurofin-56](#)  
Project ID [JC0927](#)  
Received Date **May 25, 2022**

Client Sample ID			SX_OB_20220 524_16_27_SR RINSATE_EU F	SX_OB_20220 524_16_28_SB BLANK_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0060321	M22- My0060322
Date Sampled			May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit		
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	89	93
13C5-PFPeA (surr.)	1	%	112	89
13C5-PFHxA (surr.)	1	%	90	97
13C4-PFHpA (surr.)	1	%	99	95
13C8-PFOA (surr.)	1	%	60	52
13C5-PFNA (surr.)	1	%	104	93
13C6-PFDA (surr.)	1	%	60	18
13C2-PFUnDA (surr.)	1	%	64	27
13C2-PFDoDA (surr.)	1	%	91	99
13C2-PFTeDA (surr.)	1	%	95	96
<b>Perfluoroalkyl sulfonamido substances</b>				
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	88	79

Client Sample ID			SX_OB_20220 524_16_27_SR _RINSATE_EU F	SX_OB_20220 524_16_28_SB _BLANK_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0060321	M22- My0060322
Date Sampled			May 24, 2022	May 24, 2022
Test/Reference	LOR	Unit		
<b>Perfluoroalkyl sulfonamido substances</b>				
D3-N-MeFOSA (surr.)	1	%	66	54
D5-N-EtFOSA (surr.)	1	%	53	44
D7-N-MeFOSE (surr.)	1	%	95	108
D9-N-EtFOSE (surr.)	1	%	94	88
D5-N-EtFOSAA (surr.)	1	%	142	112
D3-N-MeFOSAA (surr.)	1	%	97	100
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>				
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	112	108
18O2-PFHxS (surr.)	1	%	67	84
13C8-PFOS (surr.)	1	%	121	135
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	61	63
13C2-6:2 FTSA (surr.)	1	%	35	44
13C2-8:2 FTSA (surr.)	1	%	101	59
13C2-10:2 FTSA (surr.)	1	%	75	112
<b>PFASs Summations</b>				
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 25, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	May 25, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	May 25, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	May 25, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	May 25, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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**Received:** May 25, 2022 11:20 AM  
**Due:** Jun 1, 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_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	Soil	M22-My0060315		X	X	X
2	SX_OB_20220524_08_09_S_S_PRIMARY_EUF	May 24, 2022	8:09AM	Soil	M22-My0060316		X	X	X
3	SX_OB_20220524_12_02_S_S_PRIMARY_EUF	May 24, 2022	12:02PM	Soil	M22-My0060317		X	X	X



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<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
4	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	Soil	M22-My0060318		X	X	X
5	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	Soil	M22-My0060319		X	X	X
6	SX_OB_20220524_16_08_SS_DUPLICAT E_EUF	May 24, 2022	4:27PM	Soil	M22-My0060320		X	X	X
7	SX_OB_20220524_16_27_S	May 24, 2022	4:27PM	Water	M22-My0060321			X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	R_RINSATE_EUF								
8	SX_OB_20220524_16_28_S_B_BLANK_EUF	May 24, 2022	4:28PM	Water	M22-My0060322			X	
9	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	Soil	M22-My0060323		X	X	X
10	SX_OB_20220524_19_59_S_S_DUPLICAT_E_EUF	May 24, 2022	7:59PM	Soil	M22-My0060324		X	X	X

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<b>Project Name:</b>	20220525044909-Eurofin-56	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
11	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	Soil	M22-My0060325		X	X	X
12	SX_OB_20220525_00_03_SS_PRIMARY_EUF	May 25, 2022	12:03AM	Soil	M22-My0060326		X	X	X
13	SX_OB_20220525_04_00_SS_PRIMARY_EUF	May 25, 2022	4:00AM	Soil	M22-My0060327		X	X	X
14	SX_IB_20220525_04_11_SS	May 25, 2022	4:11AM	Soil	M22-My0060328		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF								
15	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - pH 5.0	M22-My0060329	X		X	
16	SX_OB_20220524_08_09_SS_PRIMARY_EUF	May 24, 2022	8:09AM	AUS Leachate - pH 5.0	M22-My0060330	X		X	
17	SX_OB_20220524_12_02_SS_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - pH 5.0	M22-My0060331	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
18	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - pH 5.0	M22-My0060332	X		X	
19	SX_OB_20220524_16_08_SS_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - pH 5.0	M22-My0060333	X		X	
20	SX_OB_20220524_16_08_SS_DUPLICAT E_EUF	May 24, 2022	4:27PM	AUS Leachate - pH 5.0	M22-My0060334	X		X	
21	SX_OB_20220524_19_59_S	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060335	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF								
22	SX_OB_20220524_19_59_S_S_DUPLICATED_EUF	May 24, 2022	7:59PM	AUS Leachate - pH 5.0	M22-My0060336	X		X	
23	SX_IB_20220524_20_03_SS_PRIMARY_EUF	May 24, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0060337	X		X	
24	SX_OB_20220525_00_03_S_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - pH 5.0	M22-My0060338	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
25	SX_OB_20220525_04_00_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - pH 5.0	M22-My0060339	X		X	
26	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0060340	X		X	
27	SX_IB_20220524_08_06_SS_TRIPPLICATE_EUF	May 24, 2022	8:06AM	AUS Leachate - Reagent Water	M22-My0060341	X		X	
28	SX_OB_20220524_08_09_S	May 24, 2022	8:09AM	AUS Leachate - Reagent	M22-My0060342	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	S_PRIMARY_EUF			Water					
29	SX_OB_20220524_12_02_S_PRIMARY_EUF	May 24, 2022	12:02PM	AUS Leachate - Reagent Water	M22-My0060343	X	X		
30	SX_IB_20220524_12_11_SS_PRIMARY_EUF	May 24, 2022	12:11PM	AUS Leachate - Reagent Water	M22-My0060344	X	X		
31	SX_OB_20220524_16_08_S_PRIMARY_EUF	May 24, 2022	4:08PM	AUS Leachate - Reagent Water	M22-My0060345	X	X		



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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
32	SX_OB_20220524_16_08_S_S_DUPLICAT_E_EUF	May 24, 2022	4:27PM	AUS Leachate - Reagent Water	M22-My0060346	X		X	
33	SX_OB_20220524_19_59_S_S_PRIMARY_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060347	X		X	
34	SX_OB_20220524_19_59_S_S_DUPLICAT_E_EUF	May 24, 2022	7:59PM	AUS Leachate - Reagent Water	M22-My0060348	X		X	
35	SX_IB_20220524_20_03_SS	May 24, 2022	8:03PM	AUS Leachate - Reagent	M22-My0060349	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_PRIMARY_EUF			Water					
36	SX_OB_20220525_00_03_S_PRIMARY_EUF	May 25, 2022	12:03AM	AUS Leachate - Reagent Water	M22-My0060350	X	X		
37	SX_OB_20220525_04_00_S_PRIMARY_EUF	May 25, 2022	4:00AM	AUS Leachate - Reagent Water	M22-My0060351	X	X		
38	SX_IB_20220525_04_11_SS_PRIMARY_EUF	May 25, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0060352	X	X		

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Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IMRG 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				
<b>Test Counts</b>	24	12	38	12

**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**

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

**Terms**

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	122		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	99		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	96		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	112		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	110		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	91		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	105		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	98		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	89		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	94		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	95		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>								
Perfluorooctane sulfonamide (FOSA)	%	68			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	73			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	87			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	119			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	80			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	120			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	57			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>								
Perfluorobutanesulfonic acid (PFBS)	%	71			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	69			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	66			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	118			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	115			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	92			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	93			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	58			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	118			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	126			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	106			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	144			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>								
Perfluorobutanoic acid (PFBA)	M22-My0063968	NCP	%	120		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0063968	NCP	%	103		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0063968	NCP	%	84		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0063968	NCP	%	105		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0063968	NCP	%	116		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0063968	NCP	%	89		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0063968	NCP	%	59		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0063968	NCP	%	86		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0063968	NCP	%	90		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0063968	NCP	%	86		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0063968	NCP	%	98		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>								
Perfluorooctane sulfonamide (FOSA)	M22-My0063968	NCP	%	71		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0063968	NCP	%	105		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0063968	NCP	%	96		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0063968	NCP	%	108		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0063968	NCP	%	78		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-My0063968	NCP	%	48			50-150	Fail	Q08
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0063968	NCP	%	64			50-150	Pass	
<b>Spike - % Recovery</b>									
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-My0063968	NCP	%	98			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0063968	NCP	%	63			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0063968	NCP	%	94			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0063968	NCP	%	100			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0063968	NCP	%	83			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0063968	NCP	%	90			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0063968	NCP	%	100			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0063968	NCP	%	59			50-150	Pass	
<b>Spike - % Recovery</b>									
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0063968	NCP	%	120			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0063968	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0063968	NCP	%	140			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0063968	NCP	%	144			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTEDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0051595	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).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

**Authorised by:**

Michael Cassidy	Analytical Services Manager
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](#).

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**CHAIN OF CUSTODY RECORD**

Sydney Laboratory  
 Brisbane Laboratory  
 Perth Laboratory  
 Melbourne Laboratory

Company <b>AGON Environmental - Tunnel Spoil Testing</b>		Project No <b>JC0927</b>	Project Manager <b>Craig Trimbur</b>	Sampler(s) <b>TB - Agon Martha - Agon</b>					
Address <b>Unit H76, 63-85 Turner St, Port Melbourne VIC 3207</b>		Project Name <b>WGTB-Tunnel Ref: 20220528044829-Eurofile-62</b>	EDD Format <b>Excel</b>	Handed over by					
Contact Name <b>Craig Trimbur David Lawson</b>		Special Directions <b>Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.</b>	Email for Invoice <b>finance@agonenviro.com.au LabReports.TST@agonenviro.com.au</b>						
Phone No <b>+61 400 826 007 (Craig) +61 490 411 004 (David)</b>			Email for Results <b>LabReports.TST@agonenviro.com.au agonenvironmental@aedel.com.au mothertubebresults@wgtb.com.au Amit.Kaur@agile-andyde.com.au</b>						
Purchase Order		Containers <b>500ml Plastic 200ml Plastic 125ml Plastic 200ml Amber Glass 400ml VOA vial 500ml PFAS Bottle Jar (Glass or HDPE)</b>		Required Turnaround Time (TAT) <b>Overnight (reporting by Sat)* Same day* 1 day* 2 days* 3 days* 5 days (Standard) Other( )</b>					
Quote ID No <b>Agon WGTB TST</b>		Other (Assessments/Checklist/Confirming)		Sample Comments <b>Dangerous Goods Hazard Warning</b>					
No	Client Sample ID	Sampled Date/Time	Matrix	Method	Counters	Signature	Date	Time	Temperature
1	SX_OB_20220528_06_11_SS_TripKete_EUF	25.05.2022 08:11	S	X	X	X	X	X	1
2	SX_IB_20220528_06_16_SS_Primary_EUF	25.05.2022 08:16	S	X	X	X	X	X	1
3	SX_OB_20220528_12_03_SS_Primary_EUF	25.05.2022 12:03	S	X	X	X	X	X	1
4	SX_IB_20220528_16_01_SS_Primary_EUF	25.05.2022 16:01	S	X	X	X	X	X	1
5	SX_OB_20220528_16_07_SS_Primary_EUF	25.05.2022 16:07	S	X	X	X	X	X	1
6	SX_OB_20220528_16_08_Duplicate_EUF	25.05.2022 16:09	S	X	X	X	X	X	1
7	SX_OR_20220528_16_20_SR_Rinset_EUF	25.05.2022 16:20	W			X			1
8	SX_OB_20220528_16_21_SB_Blank_EUF	25.05.2022 16:21	W			X			1
9	SX_IB_20220528_20_03_SS_Primary_EUF	25.05.2022 20:03	S	X	X	X	X	X	1
10	SX_IB_20220528_20_03_SS_Duplicate_EUF	25.05.2022 20:03	S	X	X	X	X	X	1
11	SX_OB_20220528_20_23_SS_Primary_EUF	25.05.2022 20:23	S	X	X	X	X	X	1
12	SX_IB_20220528_20_30_SR_Rinset_EUF	25.05.2022 20:32	W			X			1
13	SX_IB_20220528_20_34_SB_Blank_EUF	25.05.2022 20:33	W			X			1
14	SX_OB_20220528_00_10_SS_Primary_EUF	26.05.2022 00:10	S	X	X	X	X	X	1
15	SX_IB_20220528_04_03_SS_Primary_EUF	26.05.2022 04:03	S	X	X	X	X	X	1
16	SX_OB_20220528_04_11_SS_Primary_EUF	26.05.2022 04:11	S	X	X	X	X	X	1
Total Counts		12	12	12	12	12	4	12	
Method Statement		Counter (W) <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Postal <input type="checkbox"/>		Name <i>Thomas</i> Signature <i>[Signature]</i> Date <b>26/5/22</b> Time		Signature <i>[Signature]</i> Date <b>26/5</b> Time <b>12:00</b> Report No <b>891845</b>		Temperature <b>16.1°</b>	

Dandenong

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 **891845-L**  
Project name **20220526044629-Eurofin-52**  
Project ID **JC0927**  
Received Date **May 26, 2022**

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_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- My0062745	M22- My0062746	M22- My0062747	M22- My0062748
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.1	5.1	5.0	5.3
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	117	99	103	103
13C5-PFPeA (surr.)	1	%	106	77	107	94
13C5-PFHxA (surr.)	1	%	111	96	108	104
13C4-PFHpA (surr.)	1	%	90	54	88	92
13C8-PFOA (surr.)	1	%	111	98	102	115
13C5-PFNA (surr.)	1	%	116	101	110	124
13C6-PFDA (surr.)	1	%	103	97	89	104
13C2-PFUnDA (surr.)	1	%	99	88	84	95
13C2-PFDoDA (surr.)	1	%	103	81	78	86
13C2-PFTTeDA (surr.)	1	%	132	105	73	112

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_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- My0062745	M22- My0062746	M22- My0062747	M22- My0062748
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	96	88	74	84
D3-N-MeFOSA (surr.)	1	%	84	100	50	67
D5-N-EtFOSA (surr.)	1	%	87	100	46	76
D7-N-MeFOSE (surr.)	1	%	69	71	46	62
D9-N-EtFOSE (surr.)	1	%	75	70	53	68
D5-N-EtFOSAA (surr.)	1	%	99	103	104	105
D3-N-MeFOSAA (surr.)	1	%	88	94	83	94
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	113	94	105	103
18O2-PFHxS (surr.)	1	%	100	102	108	109
13C8-PFOS (surr.)	1	%	103	86	106	97
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	110	144	102	72
13C2-6:2 FTSA (surr.)	1	%	141	107	135	60
13C2-8:2 FTSA (surr.)	1	%	82	77	68	58
13C2-10:2 FTSA (surr.)	1	%	102	80	77	90
<b>PFASs Summations</b>						
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 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- My0062749	M22- My0062750	M22- My0062751	M22- My0062752
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.0	5.0	5.3	5.3
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	97	104	101	99
13C5-PFPeA (surr.)	1	%	115	100	101	95
13C5-PFHxA (surr.)	1	%	94	91	107	106
13C4-PFHpA (surr.)	1	%	84	85	95	85
13C8-PFOA (surr.)	1	%	101	102	100	109
13C5-PFNA (surr.)	1	%	107	106	116	109
13C6-PFDA (surr.)	1	%	95	103	102	103
13C2-PFUnDA (surr.)	1	%	98	100	106	94
13C2-PFDoDA (surr.)	1	%	86	90	91	92
13C2-PFTeDA (surr.)	1	%	113	105	119	109
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	92	105	85	90
D3-N-MeFOSA (surr.)	1	%	81	109	57	63
D5-N-EtFOSA (surr.)	1	%	88	118	58	64
D7-N-MeFOSE (surr.)	1	%	68	78	66	63
D9-N-EtFOSE (surr.)	1	%	79	85	79	77
D5-N-EtFOSAA (surr.)	1	%	109	115	106	115
D3-N-MeFOSAA (surr.)	1	%	100	86	91	86

Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du _plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- My0062749	M22- My0062750	M22- My0062751	M22- My0062752
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	92	100	96	99
18O2-PFHxS (surr.)	1	%	96	103	93	102
13C8-PFOS (surr.)	1	%	101	101	99	102
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	104	111	70	95
13C2-6:2 FTSA (surr.)	1	%	116	113	64	57
13C2-8:2 FTSA (surr.)	1	%	71	72	68	72
13C2-10:2 FTSA (surr.)	1	%	84	91	93	90
<b>PFASs Summations</b>						
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 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_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- My0062753	M22- My0062754	M22- My0062755	M22- My0062756
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.0	5.0	5.0	5.0

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_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- My0062753	M22- My0062754	M22- My0062755	M22- My0062756
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	96	95	100	97
13C5-PFPeA (surr.)	1	%	88	93	87	93
13C5-PFHxA (surr.)	1	%	93	77	69	89
13C4-PFHpA (surr.)	1	%	93	83	56	81
13C8-PFOA (surr.)	1	%	100	97	103	100
13C5-PFNA (surr.)	1	%	114	106	111	109
13C6-PFDA (surr.)	1	%	103	102	96	88
13C2-PFUnDA (surr.)	1	%	87	99	100	85
13C2-PFDoDA (surr.)	1	%	77	87	96	74
13C2-PFTeDA (surr.)	1	%	96	127	110	90
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	79	91	99	86
D3-N-MeFOSA (surr.)	1	%	39	85	106	64
D5-N-EtFOSA (surr.)	1	%	37	85	107	57
D7-N-MeFOSE (surr.)	1	%	40	63	74	61
D9-N-EtFOSE (surr.)	1	%	54	77	81	60
D5-N-EtFOSAA (surr.)	1	%	98	103	120	110
D3-N-MeFOSAA (surr.)	1	%	86	93	85	80
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoronanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_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- My0062753	M22- My0062754	M22- My0062755	M22- My0062756
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	101	88	91	99
18O2-PFHxS (surr.)	1	%	110	91	93	91
13C8-PFOS (surr.)	1	%	95	93	95	91
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	110	139	157	112
13C2-6:2 FTSA (surr.)	1	%	128	115	86	115
13C2-8:2 FTSA (surr.)	1	%	69	72	90	73
13C2-10:2 FTSA (surr.)	1	%	95	96	97	73
<b>PFASs Summations</b>						
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 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_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- My0062757	M22- My0062758	M22- My0062759	M22- My0062760
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	6.2	8.1	7.5	9.2
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01



Client Sample ID			SX_OB_20220 525_08_11_SS TriPLICATE_EU F	SX_IB_202205 25_08_16_SS Primary_EUF	SX_OB_20220 525_12_03_SS Primary_EUF	SX_IB_202205 25_16_01_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- My0062757	M22- My0062758	M22- My0062759	M22- My0062760
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	74	84	66	85
13C5-PFPeA (surr.)	1	%	73	72	66	93
13C5-PFHxA (surr.)	1	%	62	74	53	79
13C4-PFHpA (surr.)	1	%	83	90	58	80
13C8-PFOA (surr.)	1	%	107	121	72	87
13C5-PFNA (surr.)	1	%	100	116	71	74
13C6-PFDA (surr.)	1	%	103	92	111	94
13C2-PFUnDA (surr.)	1	%	84	88	61	76
13C2-PFDoDA (surr.)	1	%	100	96	79	95
13C2-PFTeDA (surr.)	1	%	88	93	82	75
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	67	77	53	79
D3-N-MeFOSA (surr.)	1	%	64	87	44	105
D5-N-EtFOSA (surr.)	1	%	65	93	44	99
D7-N-MeFOSE (surr.)	1	%	52	60	45	44
D9-N-EtFOSE (surr.)	1	%	46	44	31	45
D5-N-EtFOSAA (surr.)	1	%	76	49	66	60
D3-N-MeFOSAA (surr.)	1	%	106	66	109	47
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	57	86	51	95
18O2-PFHxS (surr.)	1	%	60	73	76	54
13C8-PFOS (surr.)	1	%	86	95	68	88

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
<b>Sample Matrix</b>			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
<b>Eurofins Sample No.</b>			M22- My0062757	M22- My0062758	M22- My0062759	M22- My0062760
<b>Date Sampled</b>			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	106	165	83	110
13C2-6:2 FTSA (surr.)	1	%	99	126	86	110
13C2-8:2 FTSA (surr.)	1	%	116	161	110	119
13C2-10:2 FTSA (surr.)	1	%	94	90	102	109
<b>PFASs Summations</b>						
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 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du _PLICATE_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
<b>Sample Matrix</b>			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
<b>Eurofins Sample No.</b>			M22- My0062761	M22- My0062762	M22- My0062763	M22- My0062764
<b>Date Sampled</b>			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	8.1	7.9	9.2	9.2
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	76	96	85	94

Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0062761	M22- My0062762	M22- My0062763	M22- My0062764
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C5-PFPeA (surr.)	1	%	67	83	108	85
13C5-PFHxA (surr.)	1	%	61	66	84	91
13C4-PFHpA (surr.)	1	%	81	100	73	103
13C8-PFOA (surr.)	1	%	104	120	77	92
13C5-PFNA (surr.)	1	%	96	110	96	125
13C6-PFDA (surr.)	1	%	108	89	59	46
13C2-PFUnDA (surr.)	1	%	53	73	69	71
13C2-PFDoDA (surr.)	1	%	84	98	84	114
13C2-PFTeDA (surr.)	1	%	85	93	75	86
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	71	78	77	89
D3-N-MeFOSA (surr.)	1	%	68	59	47	69
D5-N-EtFOSA (surr.)	1	%	68	62	50	64
D7-N-MeFOSE (surr.)	1	%	48	54	39	44
D9-N-EtFOSE (surr.)	1	%	48	49	38	48
D5-N-EtFOSAA (surr.)	1	%	72	88	33	74
D3-N-MeFOSAA (surr.)	1	%	31	95	41	140
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	77	68	90	114
18O2-PFHxS (surr.)	1	%	59	97	67	70
13C8-PFOS (surr.)	1	%	109	99	82	104

<b>Client Sample ID</b>			<a href="#">SX_OB_20220525_16_07_SS_Primary_EUF</a>	<a href="#">SX_OB_20220525_16_09_Duplicate_EUF</a>	<a href="#">SX_IB_20220525_20_03_SS_Primary_EUF</a>	<a href="#">SX_IB_20220525_20_03_SS_Duplicate_EUF</a>
<b>Sample Matrix</b>			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
<b>Eurofins Sample No.</b>			M22-My0062761	M22-My0062762	M22-My0062763	M22-My0062764
<b>Date Sampled</b>			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
<b>Test/Reference</b>	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	105	145	111	166
13C2-6:2 FTSA (surr.)	1	%	123	93	89	99
13C2-8:2 FTSA (surr.)	1	%	136	152	115	123
13C2-10:2 FTSA (surr.)	1	%	87	129	117	125
<b>PFASs Summations</b>						
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

<b>Client Sample ID</b>			<a href="#">SX_OB_20220526_00_23_SS_Primary_EUF</a>	<a href="#">SX_OB_20220526_00_10_SS_Primary_EUF</a>	<a href="#">SX_IB_20220526_04_03_SS_Primary_EUF</a>	<a href="#">SX_OB_20220526_04_11_SS_Primary_EUF</a>
<b>Sample Matrix</b>			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
<b>Eurofins Sample No.</b>			M22-My0062765	M22-My0062766	M22-My0062767	M22-My0062768
<b>Date Sampled</b>			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
<b>Test/Reference</b>	LOR	Unit				
<b>AUS Leaching Procedure</b>						
Leachate Fluid <sup>C01</sup>		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	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	8.4	8.1	8.5	8.8
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	71	93	94	75
13C5-PFPeA (surr.)	1	%	81	96	95	66

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_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- My0062765	M22- My0062766	M22- My0062767	M22- My0062768
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C5-PFHxA (surr.)	1	%	56	64	55	60
13C4-PFHpA (surr.)	1	%	68	97	111	71
13C8-PFOA (surr.)	1	%	92	55	133	91
13C5-PFNA (surr.)	1	%	84	121	107	98
13C6-PFDA (surr.)	1	%	51	88	103	40
13C2-PFUnDA (surr.)	1	%	33	81	98	72
13C2-PFDoDA (surr.)	1	%	77	107	106	84
13C2-PFTeDA (surr.)	1	%	87	89	91	85
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	57	93	93	76
D3-N-MeFOSA (surr.)	1	%	67	57	63	66
D5-N-EtFOSA (surr.)	1	%	69	63	64	76
D7-N-MeFOSE (surr.)	1	%	40	62	57	51
D9-N-EtFOSE (surr.)	1	%	41	54	47	42
D5-N-EtFOSAA (surr.)	1	%	71	79	65	57
D3-N-MeFOSAA (surr.)	1	%	100	71	92	109
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	52	68	52	57
18O2-PFHxS (surr.)	1	%	61	81	76	61
13C8-PFOS (surr.)	1	%	83	108	98	74
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_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- My0062765	M22- My0062766	M22- My0062767	M22- My0062768
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
13C2-4:2 FTSA (surr.)	1	%	85	139	164	108
13C2-6:2 FTSA (surr.)	1	%	82	97	146	44
13C2-8:2 FTSA (surr.)	1	%	120	91	139	56
13C2-10:2 FTSA (surr.)	1	%	95	141	135	113
<b>PFASs Summations</b>						
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 27, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 27, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 27, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 26, 2022	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
<b>Address:</b>	3/224 Glen Osmond Road Fullarton SA 5063	<b>Report #:</b>	891845	<b>Due:</b>	Jun 2, 2022
<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	Soil	M22-My0062729		X	X	X
2	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	Soil	M22-My0062730		X	X	X
3	SX_OB_20220525_12_03_S_S_Primary_EUF	May 25, 2022	12:03PM	Soil	M22-My0062731		X	X	X
4	SX_IB_202205	May 25, 2022	4:01PM	Soil	M22-		X	X	X



<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_16_01_SS _Primary_EUF				My0062732				
5	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	Soil	M22- My0062733		X	X	X
6	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	Soil	M22- My0062734		X	X	X
7	SX_OB_20220 525_16_20_S R_Rinsate_EU F	May 25, 2022	4:20PM	Water	M22- My0062735			X	
8	SX_OB_20220	May 25, 2022	4:21PM	Water	M22-			X	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
8	SX_OB_20220525_16_21_S B_Blank_EUF	May 25, 2022	4:21PM	Water	M22-My0062736				
9	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	Soil	M22-My0062737		X	X	X
10	SX_IB_20220525_20_03_SS_Duplicate_EUF	May 25, 2022	8:03PM	Soil	M22-My0062738		X	X	X
11	SX_OB_20220525_20_23_S S_Primary_EUF	May 25, 2022	8:23PM	Soil	M22-My0062739		X	X	X

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
<b>Address:</b>	3/224 Glen Osmond Road Fullarton SA 5063	<b>Report #:</b>	891845	<b>Due:</b>	Jun 2, 2022
<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
12	SX_IB_20220525_20_32_SR_Rinsate_EUF	May 25, 2022	8:32PM	Water	M22-My0062740			X	
13	SX_IB_20220525_20_33_SB_Blank_EUF	May 25, 2022	8:33PM	Water	M22-My0062741			X	
14	SX_OB_20220526_00_10_SS_Primary_EUF	May 26, 2022	12:10AM	Soil	M22-My0062742		X	X	X
15	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	Soil	M22-My0062743		X	X	X
16	SX_OB_20220526_04_11AM	May 26, 2022	4:11AM	Soil	M22-		X	X	X

**Company Name:** Agon Environmental Pty Ltd - VIC  
**Address:** 3/224 Glen Osmond Road  
Fullarton  
SA 5063  
  
**Project Name:** 20220526044629-Eurofin-52  
**Project ID:** JC0927

**Order No.:**  
**Report #:** 891845  
**Phone:** 08 8338 1009  
**Fax:**

**Received:** May 26, 2022 12:00 PM  
**Due:** Jun 2, 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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
16	SX_OB_20220526_04_11_S_S_Primary_EU_F	May 26, 2022	4:11AM	Soil	M22-My0062744				
17	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0062745	X		X	
18	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - pH 5.0	M22-My0062746	X		X	
19	SX_OB_20220525_12_03_S_S_Primary_EU	May 25, 2022	12:03PM	AUS Leachate - pH 5.0	M22-My0062747	X		X	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	F								
20	SX_IB_20220525_16_01_SS_Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - pH 5.0	M22-My0062748	X		X	
21	SX_OB_20220525_16_07_S_Primary_EUF	May 25, 2022	4:07PM	AUS Leachate - pH 5.0	M22-My0062749	X		X	
22	SX_OB_20220525_16_09_Duplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - pH 5.0	M22-My0062750	X		X	
23	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062751	X		X	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
<b>Address:</b>	3/224 Glen Osmond Road Fullarton SA 5063	<b>Report #:</b>	891845	<b>Due:</b>	Jun 2, 2022
<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
24	SX_IB_20220525_20_03_SS_Duplicate_EU_F	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062752	X		X	
25	SX_OB_20220525_20_23_SS_Primary_EU_F	May 25, 2022	8:23PM	AUS Leachate - pH 5.0	M22-My0062753	X		X	
26	SX_OB_20220526_00_10_SS_Primary_EU_F	May 26, 2022	12:10AM	AUS Leachate - pH 5.0	M22-My0062754	X		X	
27	SX_IB_20220526_04_03_SS	May 26, 2022	4:03AM	AUS Leachate - pH 5.0	M22-My0062755	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_Primary_EUF								
28	SX_OB_20220526_04_11_S_S_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0062756	X		X	
29	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - Reagent Water	M22-My0062757	X		X	
30	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - Reagent Water	M22-My0062758	X		X	
31	SX_OB_20220525_12_03_S	May 25, 2022	12:03PM	AUS Leachate - Reagent	M22-My0062759	X		X	

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	525_12_03_S S_Primary_EU F			- Reagent Water	My0062759				
32	SX_IB_202205 25_16_01_SS _Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - Reagent Water	M22- My0062760	X		X	
33	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	AUS Leachate - Reagent Water	M22- My0062761	X		X	
34	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - Reagent Water	M22- My0062762	X		X	
35	SX_IB_202205	May 25, 2022	8:03PM	AUS Leachate	M22-	X		X	



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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_20_03_SS _Primary_EUF			- Reagent Water	My0062763				
36	SX_IB_202205 25_20_03_SS _Duplicate_EU F	May 25, 2022	8:03PM	AUS Leachate - Reagent Water	M22- My0062764	X		X	
37	SX_OB_20220 525_20_23_S S_Primary_EU F	May 25, 2022	8:23PM	AUS Leachate - Reagent Water	M22- My0062765	X		X	
38	SX_OB_20220 526_00_10_S S_Primary_EU F	May 26, 2022	12:10AM	AUS Leachate - Reagent Water	M22- My0062766	X		X	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
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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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
39	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	AUS Leachate - Reagent Water	M22-My0062767	X		X	
40	SX_OB_20220526_04_11_SS_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0062768	X		X	
<b>Test Counts</b>						24	12	40	12

## 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

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

### Terms

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	100		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	107		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	85		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	85		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	95		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	108		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	79		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	86		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	134		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	88		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code		
<b>LCS - % Recovery</b>									
<b>Perfluoroalkyl sulfonamido substances</b>									
Perfluorooctane sulfonamide (FOSA)	%	84			50-150	Pass			
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	107			50-150	Pass			
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	105			50-150	Pass			
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	105			50-150	Pass			
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	96			50-150	Pass			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	82			50-150	Pass			
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	129			50-150	Pass			
<b>LCS - % Recovery</b>									
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>									
Perfluorobutanesulfonic acid (PFBS)	%	77			50-150	Pass			
Perfluorononanesulfonic acid (PFNS)	%	91			50-150	Pass			
Perfluoropropanesulfonic acid (PFPrS)	%	61			50-150	Pass			
Perfluoropentanesulfonic acid (PFPeS)	%	86			50-150	Pass			
Perfluorohexanesulfonic acid (PFHxS)	%	84			50-150	Pass			
Perfluoroheptanesulfonic acid (PFHpS)	%	83			50-150	Pass			
Perfluorooctanesulfonic acid (PFOS)	%	77			50-150	Pass			
Perfluorodecanesulfonic acid (PFDS)	%	70			50-150	Pass			
<b>LCS - % Recovery</b>									
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	112			50-150	Pass			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	104			50-150	Pass			
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	130			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
<b>Duplicate</b>									
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>									
				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
<b>Duplicate</b>									
<b>Perfluoroalkyl sulfonamido substances</b>									
				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonic acids (PFSAs)</b>				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
<b>Duplicate</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062752	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062752	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
<b>Duplicate</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062753	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062753	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062759	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062759	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass



Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062766	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062766	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062766	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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Agon Environmental Pty Ltd - VIC  
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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 **891845-S**  
Project name **20220526044629-Eurofin-52**  
Project ID **JC0927**  
Received Date **May 26, 2022**

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
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 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Volatile Organics</b>						
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	%	67	66	69	83
Toluene-d8 (surr.)	1	%	129	128	70	83
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	%	73	79	99	109
p-Terphenyl-d14 (surr.)	1	%	64	61	134	145
<b>Organochlorine Pesticides</b>						
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	%	77	68	63	67
Tetrachloro-m-xylene (surr.)	1	%	54	137	113	62

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Polychlorinated Biphenyls</b>						
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	%	77	68	63	67
Tetrachloro-m-xylene (surr.)	1	%	54	137	113	62
<b>Phenols (Halogenated)</b>						
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
<b>Phenols (non-Halogenated)</b>						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	39	36	45	46
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
<b>Cyanide (total)</b>						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
<b>Fluoride (Total)</b>						
Fluoride (Total)	100	mg/kg	< 100	120	< 100	< 100
<b>pH (1:5 Aqueous extract at 25°C as rec.)</b>						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.4	8.3	8.4	10
<b>% Moisture</b>						
% Moisture	1	%	32	30	31	36
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	47	26	55	37
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	130	150	130	130
Copper	5	mg/kg	49	70	55	64
Lead	5	mg/kg	5.3	< 5	6.0	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 525_08_11_SS _TriPLICATE_EU F	SX_IB_202205 25_08_16_SS _Primary_EUF	SX_OB_20220 525_12_03_SS _Primary_EUF	SX_IB_202205 25_16_01_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	130	200	140	190
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	110	94	130
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	88	95	62	77
13C5-PFPeA (surr.)	1	%	93	90	61	78
13C5-PFHxA (surr.)	1	%	96	85	57	76
13C4-PFHpA (surr.)	1	%	95	87	60	75
13C8-PFOA (surr.)	1	%	96	87	63	81
13C5-PFNA (surr.)	1	%	97	104	65	83
13C6-PFDA (surr.)	1	%	102	86	57	81
13C2-PFUnDA (surr.)	1	%	98	100	64	78
13C2-PFDoDA (surr.)	1	%	92	92	63	77
13C2-PFTeDA (surr.)	1	%	97	97	63	86
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	92	85	57	87
D3-N-MeFOSA (surr.)	1	%	82	97	61	62
D5-N-EtFOSA (surr.)	1	%	107	107	74	93
D7-N-MeFOSE (surr.)	1	%	82	97	67	86
D9-N-EtFOSE (surr.)	1	%	83	79	54	96
D5-N-EtFOSAA (surr.)	1	%	90	96	60	78
D3-N-MeFOSAA (surr.)	1	%	81	91	62	74

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062729	M22- My0062730	M22- My0062731	M22- My0062732
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	99	84	55	84
18O2-PFHxS (surr.)	1	%	89	95	57	74
13C8-PFOS (surr.)	1	%	90	90	52	81
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	104	113	84	81
13C2-6:2 FTSA (surr.)	1	%	101	124	88	73
13C2-8:2 FTSA (surr.)	1	%	61	117	56	103
13C2-10:2 FTSA (surr.)	1	%	82	102	77	90
<b>PFASs Summations</b>						
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 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du _plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20



Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
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
1.1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Volatile Organics</b>						
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	%	73	83	80	80
Toluene-d8 (surr.)	1	%	73	79	79	77
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	%	101	60	109	111
p-Terphenyl-d14 (surr.)	1	%	145	74	132	122

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Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
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	%	65	90	110	90
Tetrachloro-m-xylene (surr.)	1	%	142	136	80	91
<b>Polychlorinated Biphenyls</b>						
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	%	65	90	110	90
Tetrachloro-m-xylene (surr.)	1	%	142	136	80	91
<b>Phenols (Halogenated)</b>						
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- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Phenols (non-Halogenated)</b>						
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	%	61	INT	INT	INT
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
<b>Cyanide (total)</b>						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
<b>Fluoride (Total)</b>						
Fluoride (Total)	100	mg/kg	170	< 100	< 100	< 100
<b>pH (1:5 Aqueous extract at 25°C as rec.)</b>						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.3	8.4	10	10
<b>% Moisture</b>						
% Moisture	1	%	31	32	32	27
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	44	49	32	25
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	120	130	130	99
Copper	5	mg/kg	48	56	67	52
Lead	5	mg/kg	5.2	6.1	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	140	160	200	150
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	85	100	140	110
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTTrDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	83	98	56	54
13C5-PFPeA (surr.)	1	%	80	52	58	57
13C5-PFHxA (surr.)	1	%	83	53	60	56

Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
13C4-PFHpA (surr.)	1	%	81	54	60	58
13C8-PFOA (surr.)	1	%	87	57	62	60
13C5-PFNA (surr.)	1	%	88	55	62	58
13C6-PFDA (surr.)	1	%	85	57	66	63
13C2-PFUnDA (surr.)	1	%	88	55	62	58
13C2-PFDoDA (surr.)	1	%	85	98	60	54
13C2-PFTeDA (surr.)	1	%	88	52	67	56
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	98	120	70	66
D3-N-MeFOSA (surr.)	1	%	59	82	96	91
D5-N-EtFOSA (surr.)	1	%	100	125	147	137
D7-N-MeFOSE (surr.)	1	%	56	71	80	76
D9-N-EtFOSE (surr.)	1	%	54	65	76	72
D5-N-EtFOSAA (surr.)	1	%	82	53	62	58
D3-N-MeFOSAA (surr.)	1	%	80	51	62	56
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	90	57	61	60
18O2-PFHxS (surr.)	1	%	77	100	56	53
13C8-PFOS (surr.)	1	%	88	52	60	58
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	87	55	64	56
13C2-6:2 FTSA (surr.)	1	%	80	100	57	57

Client Sample ID			SX_OB_20220 525_16_07_SS _Primary_EUF	SX_OB_20220 525_16_09_Du plicate_EUF	SX_IB_202205 25_20_03_SS _Primary_EUF	SX_IB_202205 25_20_03_SS _Duplicate_EUF
<b>Sample Matrix</b>			Soil	Soil	Soil	Soil
<b>Eurofins Sample No.</b>			M22- My0062733	M22- My0062734	M22- My0062737	M22- My0062738
<b>Date Sampled</b>			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
13C2-8:2 FTSA (surr.)	1	%	87	64	71	63
13C2-10:2 FTSA (surr.)	1	%	93	60	80	66
<b>PFASs Summations</b>						
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 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
<b>Sample Matrix</b>			Soil	Soil	Soil	Soil
<b>Eurofins Sample No.</b>			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
<b>Date Sampled</b>			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons</b>						
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 <sup>N02</sup>	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) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	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
<b>Volatile Organics</b>						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
<b>Volatile Organics</b>						
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

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Volatile Organics</b>						
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	%	85	81	82	80
Toluene-d8 (surr.)	1	%	84	74	83	79

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
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 <sup>N07</sup>	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	%	96	128	100	107
p-Terphenyl-d14 (surr.)	1	%	112	143	85	145
<b>Organochlorine Pesticides</b>						
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



Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Dibutylchlorendate (surr.)	1	%	59	59	74	62
Tetrachloro-m-xylene (surr.)	1	%	91	67	73	133
<b>Polychlorinated Biphenyls</b>						
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	%	59	59	74	62
Tetrachloro-m-xylene (surr.)	1	%	91	67	73	133
<b>Phenols (Halogenated)</b>						
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
<b>Phenols (non-Halogenated)</b>						
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	%	51	44	50	62
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
<b>Chromium (hexavalent)</b>						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	170	200	170
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.4	8.1	7.7	9.0
% Moisture	1	%	30	29	26	30

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	180	160	27	36
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	250	130	150	100
Copper	5	mg/kg	73	100	66	45
Lead	5	mg/kg	9.2	7.8	< 5	5.0
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	7.4	< 5	< 5	< 5
Nickel	5	mg/kg	160	130	200	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	93	89	110	77
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	56	51	97	86
13C5-PFPeA (surr.)	1	%	73	52	98	86
13C5-PFHxA (surr.)	1	%	60	51	53	88
13C4-PFHpA (surr.)	1	%	57	54	50	87
13C8-PFOA (surr.)	1	%	64	55	57	98
13C5-PFNA (surr.)	1	%	57	53	51	93
13C6-PFDA (surr.)	1	%	65	56	55	50
13C2-PFUnDA (surr.)	1	%	59	55	51	93
13C2-PFDoDA (surr.)	1	%	62	53	102	88
13C2-PFTeDA (surr.)	1	%	66	59	55	95
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	67	59	55	51
D3-N-MeFOSA (surr.)	1	%	102	87	78	70

Client Sample ID			SX_OB_20220 525_20_23_SS _Primary_EUF	SX_OB_20220 526_00_10_SS _Primary_EUF	SX_IB_202205 26_04_03_SS _Primary_EUF	SX_OB_20220 526_04_11_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0062739	M22- My0062742	M22- My0062743	M22- My0062744
Date Sampled			May 25, 2022	May 26, 2022	May 26, 2022	May 26, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonamido substances</b>						
D5-N-EtFOSA (surr.)	1	%	141	129	122	109
D7-N-MeFOSE (surr.)	1	%	82	71	68	60
D9-N-EtFOSE (surr.)	1	%	78	68	66	57
D5-N-EtFOSAA (surr.)	1	%	60	57	54	92
D3-N-MeFOSAA (surr.)	1	%	54	51	55	81
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	63	54	56	97
18O2-PFHxS (surr.)	1	%	56	50	52	86
13C8-PFOS (surr.)	1	%	60	55	51	91
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	10	ug/kg	< 10	< 10	< 10	< 10
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	60	54	98	86
13C2-6:2 FTSA (surr.)	1	%	56	51	92	83
13C2-8:2 FTSA (surr.)	1	%	75	70	60	87
13C2-10:2 FTSA (surr.)	1	%	72	69	58	107
<b>PFASs Summations</b>						
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 27, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 27, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 27, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	May 27, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	May 27, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 27, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	May 27, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	May 27, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 27, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 27, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	May 27, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	May 27, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE	Melbourne	May 28, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	May 27, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	May 27, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	May 26, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 27, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 26, 2022	

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	Soil	M22-My0062729		X	X	X
2	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	Soil	M22-My0062730		X	X	X
3	SX_OB_20220525_12_03_S_S_Primary_EUF	May 25, 2022	12:03PM	Soil	M22-My0062731		X	X	X
4	SX_IB_202205	May 25, 2022	4:01PM	Soil	M22-		X	X	X

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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_16_01_SS _Primary_EUF				My0062732				
5	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	Soil	M22- My0062733		X	X	X
6	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	Soil	M22- My0062734		X	X	X
7	SX_OB_20220 525_16_20_S R_Rinsate_EU F	May 25, 2022	4:20PM	Water	M22- My0062735			X	
8	SX_OB_20220	May 25, 2022	4:21PM	Water	M22-			X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
8	SX_OB_20220525_16_21_S B_Blank_EUF	May 25, 2022	4:21PM	Water	M22-My0062736				
9	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	Soil	M22-My0062737		X	X	X
10	SX_IB_20220525_20_03_SS_Duplicate_EUF	May 25, 2022	8:03PM	Soil	M22-My0062738		X	X	X
11	SX_OB_20220525_20_23_S S_Primary_EUF	May 25, 2022	8:23PM	Soil	M22-My0062739		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
12	SX_IB_20220525_20_32_SR_Rinsate_EUF	May 25, 2022	8:32PM	Water	M22-My0062740			X	
13	SX_IB_20220525_20_33_SB_Blank_EUF	May 25, 2022	8:33PM	Water	M22-My0062741			X	
14	SX_OB_20220526_00_10_SS_Primary_EUF	May 26, 2022	12:10AM	Soil	M22-My0062742		X	X	X
15	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	Soil	M22-My0062743		X	X	X
16	SX_OB_20220526_04_11AM	May 26, 2022	4:11AM	Soil	M22-		X	X	X



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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
16	SX_OB_20220526_04_11_S_S_Primary_EU_F	May 26, 2022	4:11AM	Soil	M22-My0062744				
17	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0062745	X		X	
18	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - pH 5.0	M22-My0062746	X		X	
19	SX_OB_20220525_12_03_S_S_Primary_EU	May 25, 2022	12:03PM	AUS Leachate - pH 5.0	M22-My0062747	X		X	

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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	F								
20	SX_IB_20220525_16_01_SS_Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - pH 5.0	M22-My0062748	X		X	
21	SX_OB_20220525_16_07_S_Primary_EUF	May 25, 2022	4:07PM	AUS Leachate - pH 5.0	M22-My0062749	X		X	
22	SX_OB_20220525_16_09_Duplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - pH 5.0	M22-My0062750	X		X	
23	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062751	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
24	SX_IB_20220525_20_03_SS_Duplicate_EU_F	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062752	X		X	
25	SX_OB_20220525_20_23_SS_Primary_EU_F	May 25, 2022	8:23PM	AUS Leachate - pH 5.0	M22-My0062753	X		X	
26	SX_OB_20220526_00_10_SS_Primary_EU_F	May 26, 2022	12:10AM	AUS Leachate - pH 5.0	M22-My0062754	X		X	
27	SX_IB_20220526_04_03_SS	May 26, 2022	4:03AM	AUS Leachate - pH 5.0	M22-My0062755	X		X	

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_Primary_EUF								
28	SX_OB_20220526_04_11_S_S_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0062756	X		X	
29	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - Reagent Water	M22-My0062757	X		X	
30	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - Reagent Water	M22-My0062758	X		X	
31	SX_OB_20220525_12_03_S	May 25, 2022	12:03PM	AUS Leachate - Reagent	M22-My0062759	X		X	

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	525_12_03_S S_Primary_EU F			- Reagent Water	My0062759				
32	SX_IB_202205 25_16_01_SS _Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - Reagent Water	M22- My0062760	X		X	
33	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	AUS Leachate - Reagent Water	M22- My0062761	X		X	
34	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - Reagent Water	M22- My0062762	X		X	
35	SX_IB_202205	May 25, 2022	8:03PM	AUS Leachate	M22-	X		X	

<b>Company Name:</b>	Agon Environmental Pty Ltd - VIC	<b>Order No.:</b>		<b>Received:</b>	May 26, 2022 12:00 PM
<b>Address:</b>	3/224 Glen Osmond Road Fullarton SA 5063	<b>Report #:</b>	891845	<b>Due:</b>	Jun 2, 2022
<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	Agon Lab Reports (Spoil Project)

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<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_20_03_SS _Primary_EUF			- Reagent Water	My0062763				
36	SX_IB_202205 25_20_03_SS _Duplicate_EU F	May 25, 2022	8:03PM	AUS Leachate - Reagent Water	M22- My0062764	X		X	
37	SX_OB_20220 525_20_23_S S_Primary_EU F	May 25, 2022	8:23PM	AUS Leachate - Reagent Water	M22- My0062765	X		X	
38	SX_OB_20220 526_00_10_S S_Primary_EU F	May 26, 2022	12:10AM	AUS Leachate - Reagent Water	M22- My0062766	X		X	

**Company Name:** Agon Environmental Pty Ltd - VIC  
**Address:** 3/224 Glen Osmond Road  
Fullarton  
SA 5063  
  
**Project Name:** 20220526044629-Eurofin-52  
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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
39	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	AUS Leachate - Reagent Water	M22-My0062767	X		X	
40	SX_OB_20220526_04_11_S_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0062768	X		X	
<b>Test Counts</b>						24	12	40	12

## 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

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

### Terms

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>						
<b>Total Recoverable Hydrocarbons</b>						
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	
<b>Method Blank</b>						
<b>Volatile Organics</b>						
Hexachlorobutadiene	mg/kg	< 0.5		0.5	Pass	
<b>Method Blank</b>						
<b>Volatile Organics</b>						
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	
<b>Method Blank</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
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	
<b>Method Blank</b>							
<b>Organochlorine Pesticides</b>							
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	
<b>Method Blank</b>							
<b>Polychlorinated Biphenyls</b>							
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	
<b>Method Blank</b>							
<b>Phenols (Halogenated)</b>							
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	
<b>Method Blank</b>							
<b>Phenols (non-Halogenated)</b>							
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	
<b>Method Blank</b>							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFSAs)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Total Recoverable Hydrocarbons</b>						
TRH C6-C9	%	106		70-130	Pass	
TRH C10-C14	%	117		70-130	Pass	
Naphthalene	%	88		70-130	Pass	
TRH C6-C10	%	106		70-130	Pass	
TRH >C10-C16	%	118		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Volatile Organics</b>						
1.1-Dichloroethene	%	86		70-130	Pass	
1.1.1-Trichloroethane	%	82		70-130	Pass	
1.2-Dichlorobenzene	%	112		70-130	Pass	
1.2-Dichloroethane	%	81		70-130	Pass	
Benzene	%	93		70-130	Pass	
Ethylbenzene	%	123		70-130	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	124		70-130	Pass	
Toluene	%	99		70-130	Pass	
Trichloroethene	%	82		70-130	Pass	
Xylenes - Total*	%	125		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Polycyclic Aromatic Hydrocarbons</b>						
Acenaphthene	%	95		70-130	Pass	
Acenaphthylene	%	108		70-130	Pass	
Anthracene	%	98		70-130	Pass	
Benz(a)anthracene	%	93		70-130	Pass	
Benzo(a)pyrene	%	105		70-130	Pass	
Benzo(b&i)fluoranthene	%	86		70-130	Pass	
Benzo(g,h,i)perylene	%	86		70-130	Pass	
Benzo(k)fluoranthene	%	117		70-130	Pass	
Chrysene	%	104		70-130	Pass	
Dibenz(a,h)anthracene	%	106		70-130	Pass	
Fluoranthene	%	112		70-130	Pass	
Fluorene	%	98		70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	82		70-130	Pass	
Naphthalene	%	96		70-130	Pass	
Phenanthrene	%	100		70-130	Pass	
Pyrene	%	111		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	%	120		70-130	Pass	
4,4'-DDD	%	103		70-130	Pass	
4,4'-DDE	%	95		70-130	Pass	
4,4'-DDT	%	125		70-130	Pass	
a-HCH	%	102		70-130	Pass	
Aldrin	%	91		70-130	Pass	
b-HCH	%	114		70-130	Pass	
d-HCH	%	90		70-130	Pass	
Dieldrin	%	108		70-130	Pass	
Endosulfan I	%	113		70-130	Pass	
Endosulfan II	%	121		70-130	Pass	
Endosulfan sulphate	%	90		70-130	Pass	
Endrin	%	87		70-130	Pass	
Endrin aldehyde	%	95		70-130	Pass	
Endrin ketone	%	92		70-130	Pass	
g-HCH (Lindane)	%	126		70-130	Pass	
Heptachlor	%	93		70-130	Pass	
Heptachlor epoxide	%	124		70-130	Pass	
Hexachlorobenzene	%	100		70-130	Pass	
Methoxychlor	%	126		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Polychlorinated Biphenyls</b>						
Aroclor-1260	%	100		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Phenols (Halogenated)</b>						
2-Chlorophenol	%	98		25-140	Pass	
2,4-Dichlorophenol	%	119		25-140	Pass	
2,4,5-Trichlorophenol	%	53		25-140	Pass	
2,4,6-Trichlorophenol	%	97		25-140	Pass	
2,6-Dichlorophenol	%	98		25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	85		25-140	Pass	
Pentachlorophenol	%	106		25-140	Pass	
Tetrachlorophenols - Total	%	109		25-140	Pass	
<b>LCS - % Recovery</b>						
<b>Phenols (non-Halogenated)</b>						
2-Cyclohexyl-4,6-dinitrophenol	%	57		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	74		25-140	Pass	
2-Nitrophenol	%	98		25-140	Pass	
2,4-Dimethylphenol	%	92		25-140	Pass	
2,4-Dinitrophenol	%	53		25-140	Pass	
2-Methylphenol (o-Cresol)	%	81		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	87		25-140	Pass	
4-Nitrophenol	%	88		25-140	Pass	
Dinoseb	%	88		25-140	Pass	
Phenol	%	87		25-140	Pass	
<b>LCS - % Recovery</b>						
Chromium (hexavalent)	%	90		70-130	Pass	
Cyanide (total)	%	117		70-130	Pass	
Fluoride (Total)	%	104		70-130	Pass	
<b>LCS - % Recovery</b>						
<b>Heavy Metals</b>						
Arsenic	%	111		80-120	Pass	
Cadmium	%	80		80-120	Pass	
Chromium	%	111		80-120	Pass	
Copper	%	109		80-120	Pass	
Lead	%	113		80-120	Pass	
Mercury	%	105		80-120	Pass	
Molybdenum	%	110		80-120	Pass	
Nickel	%	105		80-120	Pass	
Selenium	%	104		80-120	Pass	
Silver	%	80		80-120	Pass	
Tin	%	106		80-120	Pass	
Zinc	%	109		80-120	Pass	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	127		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	99		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	98		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	100		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	101		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	103		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	102		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	103		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	109		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	91		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	106		50-150	Pass	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA)	%	89		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	108		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	103		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	101		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	102		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	105		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	100			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>								
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	89			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	95			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	98			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	100			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	96			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	103			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	93			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	105			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	113			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	129			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	88			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>								
<b>Organochlorine Pesticides</b>				Result 1				
Chlordanes - Total	M22-My0063643	NCP	%	112		70-130	Pass	
4.4'-DDD	M22-My0063643	NCP	%	85		70-130	Pass	
4.4'-DDE	M22-My0063643	NCP	%	119		70-130	Pass	
4.4'-DDT	M22-My0063643	NCP	%	93		70-130	Pass	
a-HCH	M22-My0063643	NCP	%	91		70-130	Pass	
Aldrin	M22-My0063643	NCP	%	124		70-130	Pass	
b-HCH	M22-My0063643	NCP	%	103		70-130	Pass	
d-HCH	M22-My0063643	NCP	%	95		70-130	Pass	
Dieldrin	M22-My0063643	NCP	%	105		70-130	Pass	
Endosulfan I	M22-My0063643	NCP	%	85		70-130	Pass	
Endosulfan II	M22-My0063643	NCP	%	117		70-130	Pass	
Endosulfan sulphate	M22-My0063643	NCP	%	128		70-130	Pass	
Endrin	M22-My0063643	NCP	%	124		70-130	Pass	
Endrin aldehyde	M22-My0063643	NCP	%	82		70-130	Pass	
Endrin ketone	M22-My0063643	NCP	%	110		70-130	Pass	
g-HCH (Lindane)	M22-My0063643	NCP	%	86		70-130	Pass	
Heptachlor	M22-My0063643	NCP	%	95		70-130	Pass	
Heptachlor epoxide	M22-My0063643	NCP	%	117		70-130	Pass	
Hexachlorobenzene	M22-My0063643	NCP	%	88		70-130	Pass	
Methoxychlor	M22-My0063643	NCP	%	95		70-130	Pass	
<b>Spike - % Recovery</b>								
				Result 1				
Fluoride (Total)	M22-Jn0000484	NCP	%	72		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1				
Perfluorobutanoic acid (PFBA)	M22-My0062732	CP	%	119		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0062732	CP	%	129		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0062732	CP	%	117		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0062732	CP	%	122		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0062732	CP	%	126		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0062732	CP	%	109		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0062732	CP	%	112		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroundecanoic acid (PFUnDA)	M22-My0062732	CP	%	120		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0062732	CP	%	133		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0062732	CP	%	113		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062732	CP	%	129		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-My0062732	CP	%	114		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062732	CP	%	123		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062732	CP	%	126		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062732	CP	%	127		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062732	CP	%	130		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062732	CP	%	126		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062732	CP	%	134		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-My0062732	CP	%	123		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0062732	CP	%	118		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062732	CP	%	119		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062732	CP	%	124		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062732	CP	%	122		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062732	CP	%	106		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0062732	CP	%	122		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0062732	CP	%	114		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062732	CP	%	130		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062732	CP	%	121		50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062732	CP	%	137		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062732	CP	%	119		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1				
Acenaphthene	M22-My0062733	CP	%	105		70-130	Pass	
Acenaphthylene	M22-My0062733	CP	%	81		70-130	Pass	
Anthracene	M22-My0062733	CP	%	105		70-130	Pass	
Benz(a)anthracene	M22-My0062733	CP	%	104		70-130	Pass	
Benzo(a)pyrene	M22-My0062733	CP	%	105		70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Benzo(b&j)fluoranthene	M22-My0062733	CP	%	79		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0062733	CP	%	76		70-130	Pass	
Benzo(k)fluoranthene	M22-My0062733	CP	%	88		70-130	Pass	
Chrysene	M22-My0062733	CP	%	100		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0062733	CP	%	74		70-130	Pass	
Fluoranthene	M22-My0062733	CP	%	79		70-130	Pass	
Fluorene	M22-My0062733	CP	%	72		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-My0062733	CP	%	74		70-130	Pass	
Naphthalene	M22-My0062733	CP	%	104		70-130	Pass	
Phenanthrene	M22-My0062733	CP	%	72		70-130	Pass	
Pyrene	M22-My0062733	CP	%	78		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (Halogenated)</b>				Result 1				
2-Chlorophenol	M22-My0062733	CP	%	78		30-130	Pass	
2,4-Dichlorophenol	M22-My0062733	CP	%	90		30-130	Pass	
2,4,5-Trichlorophenol	M22-My0062733	CP	%	87		30-130	Pass	
2,4,6-Trichlorophenol	M22-My0062733	CP	%	82		30-130	Pass	
2,6-Dichlorophenol	M22-My0062733	CP	%	79		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0062733	CP	%	77		30-130	Pass	
Pentachlorophenol	M22-My0062733	CP	%	79		30-130	Pass	
Tetrachlorophenols - Total	M22-My0062733	CP	%	75		30-130	Pass	
<b>Spike - % Recovery</b>								
<b>Phenols (non-Halogenated)</b>				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-My0062733	CP	%	34		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-My0062733	CP	%	67		30-130	Pass	
2-Nitrophenol	M22-My0062733	CP	%	83		30-130	Pass	
2,4-Dimethylphenol	M22-My0062733	CP	%	84		30-130	Pass	
2,4-Dinitrophenol	M22-My0062733	CP	%	48		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-My0062733	CP	%	76		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0062733	CP	%	73		30-130	Pass	
4-Nitrophenol	M22-My0062733	CP	%	85		30-130	Pass	
Dinoseb	M22-My0062733	CP	%	77		30-130	Pass	
Phenol	M22-My0062733	CP	%	72		30-130	Pass	
<b>Spike - % Recovery</b>								
<b>Total Recoverable Hydrocarbons</b>				Result 1				
TRH C6-C9	M22-My0062737	CP	%	74		70-130	Pass	
Naphthalene	M22-My0062737	CP	%	82		70-130	Pass	
TRH C6-C10	M22-My0062737	CP	%	73		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Volatile Organics</b>				Result 1				
1,1-Dichloroethene	M22-My0062737	CP	%	83		70-130	Pass	
1,1,1-Trichloroethane	M22-My0062737	CP	%	75		70-130	Pass	
1,2-Dichlorobenzene	M22-My0062737	CP	%	83		70-130	Pass	
1,2-Dichloroethane	M22-My0062737	CP	%	77		70-130	Pass	
Benzene	M22-My0062737	CP	%	81		70-130	Pass	
Ethylbenzene	M22-My0062737	CP	%	80		70-130	Pass	
m&p-Xylenes	M22-My0062737	CP	%	81		70-130	Pass	
o-Xylene	M22-My0062737	CP	%	82		70-130	Pass	
Toluene	M22-My0062737	CP	%	81		70-130	Pass	
Trichloroethene	M22-My0062737	CP	%	80		70-130	Pass	
Xylenes - Total*	M22-My0062737	CP	%	81		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Heavy Metals</b>				Result 1				
Arsenic	M22-My0062737	CP	%	93		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cadmium	M22-My0062737	CP	%	101			75-125	Pass	
Chromium	M22-My0062737	CP	%	83			75-125	Pass	
Copper	M22-My0062737	CP	%	99			75-125	Pass	
Lead	M22-My0062737	CP	%	100			75-125	Pass	
Mercury	M22-My0062737	CP	%	101			75-125	Pass	
Molybdenum	M22-My0062737	CP	%	100			75-125	Pass	
Nickel	M22-My0062737	CP	%	101			75-125	Pass	
Selenium	M22-My0062737	CP	%	86			75-125	Pass	
Silver	M22-My0062737	CP	%	103			75-125	Pass	
Tin	M22-My0062737	CP	%	103			75-125	Pass	
Zinc	M22-My0062737	CP	%	95			75-125	Pass	
<b>Spike - % Recovery</b>									
<b>Total Recoverable Hydrocarbons</b>				Result 1					
TRH C10-C14	M22-My0062738	CP	%	129			70-130	Pass	
TRH >C10-C16	M22-My0062738	CP	%	126			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
% Moisture	M22-My0062730	CP	%	30	27	10	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-My0062731	CP	mg/kg	< 100	< 100	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
<b>Perfluoroalkyl sulfonamido substances</b>				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0062731	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0062731	CP	ug/kg	< 10	< 10	<1	30%	Pass	

<b>Duplicate</b>								
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
<b>Duplicate</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0062731	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0062731	CP	ug/kg	< 5	< 5	<1	30%	Pass
<b>Duplicate</b>								
<b>Total Recoverable Hydrocarbons</b>				Result 1	Result 2	RPD		
TRH C10-C14	M22-My0062732	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M22-My0062732	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M22-My0062732	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	M22-My0062732	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M22-My0062732	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M22-My0062732	CP	mg/kg	< 100	< 100	<1	30%	Pass
<b>Duplicate</b>								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1	Result 2	RPD		
Acenaphthene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4.4'-DDD	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDE	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDT	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0062732	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0062732	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dichlorophenol	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-Trichlorophenol	M22-My0062732	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4.6-Trichlorophenol	M22-My0062732	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.6-Dichlorophenol	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0062732	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0062732	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0062732	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	M22-My0062732	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	M22-My0062732	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0062732	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	M22-My0062732	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0062732	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0062732	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0062732	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0062732	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0062732	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M22-My0062734	CP	mg/kg	< 20	< 20	<1	30%	Pass
Naphthalene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M22-My0062734	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Hexachlorobutadiene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1-Dichloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trichlorobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1-Dichloroethene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1-Trichloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.1.2-Tetrachloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2-Trichloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.1.2.2-Tetrachloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dibromoethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichlorobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloropropane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.3-Trichloropropane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trimethylbenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichlorobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichloropropane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3.5-Trimethylbenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-My0062734	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0062734	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0062734	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0062734	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Tetrachloroethene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0062734	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0062734	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0062734	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0062734	CP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	M22-My0062734	CP	mg/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-My0062734	CP	mg/kg	49	49	<1	30%	Pass
Cadmium	M22-My0062734	CP	mg/kg	< 1	< 1	<1	30%	Pass
Chromium	M22-My0062734	CP	mg/kg	130	140	2.0	30%	Pass
Copper	M22-My0062734	CP	mg/kg	56	56	<1	30%	Pass
Lead	M22-My0062734	CP	mg/kg	6.1	6.2	3.0	30%	Pass
Mercury	M22-My0062734	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0062734	CP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0062734	CP	mg/kg	160	160	1.0	30%	Pass
Selenium	M22-My0062734	CP	mg/kg	< 5	< 5	<1	30%	Pass
Silver	M22-My0062734	CP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0062734	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0062734	CP	mg/kg	100	100	1.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	M22-My0062737	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M22-My0062737	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M22-My0062737	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	M22-My0062737	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M22-My0062737	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M22-My0062737	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)anthracene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4.4'-DDD	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDE	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDT	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0062737	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dichlorophenol	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-Trichlorophenol	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4.6-Trichlorophenol	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.6-Dichlorophenol	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0062737	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	M22-My0062737	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0062737	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0062737	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0062737	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0062737	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-My0062737	CP	mg/kg	32	33	1.0	30%	Pass
Cadmium	M22-My0062737	CP	mg/kg	< 1	< 1	<1	30%	Pass
Chromium	M22-My0062737	CP	mg/kg	130	130	1.0	30%	Pass
Copper	M22-My0062737	CP	mg/kg	67	68	<1	30%	Pass
Lead	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
Mercury	M22-My0062737	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0062737	CP	mg/kg	200	200	<1	30%	Pass
Selenium	M22-My0062737	CP	mg/kg	< 5	< 5	<1	30%	Pass
Silver	M22-My0062737	CP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0062737	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0062737	CP	mg/kg	140	140	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
pH (1:5 Aqueous extract at 25°C as rec.)	M22-My0062739	CP	pH Units	8.4	8.5	pass	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	M22-My0062744	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M22-My0062744	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M22-My0062744	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	M22-My0062744	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M22-My0062744	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M22-My0062744	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass



Duplicate								
<b>Organochlorine Pesticides</b>				Result 1	Result 2	RPD		
Endosulfan II	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0062744	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
<b>Polychlorinated Biphenyls</b>				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0062744	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
<b>Phenols (Halogenated)</b>				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-My0062744	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-My0062744	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0062744	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0062744	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0062744	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
<b>Phenols (non-Halogenated)</b>				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-My0062744	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-My0062744	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0062744	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-My0062744	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0062744	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0062744	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0062744	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0062744	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0062744	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0062744	CP	%	30	29	3.0	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
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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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 **891845-W**  
Project name **20220526044629-Eurofin-52**  
Project ID **JC0927**  
Received Date **May 26, 2022**

Client Sample ID			SX_OB_20220 525_16_20_SR _Rinsate_EUF	SX_OB_20220 525_16_21_SB _Blank_EUF	SX_IB_202205 25_20_32_SR_ Rinsate_EUF	SX_IB_202205 25_20_33_SB_ Blank_EUF
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M22- My0062735	M22- My0062736	M22- My0062740	M22- My0062741
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	92	88	87	69
13C5-PFPeA (surr.)	1	%	92	89	90	76
13C5-PFHxA (surr.)	1	%	93	92	93	73
13C4-PFHpA (surr.)	1	%	90	78	91	70
13C8-PFOA (surr.)	1	%	59	72	78	57
13C5-PFNA (surr.)	1	%	106	78	68	60
13C6-PFDA (surr.)	1	%	66	85	56	73
13C2-PFUnDA (surr.)	1	%	85	55	83	55
13C2-PFDoDA (surr.)	1	%	95	84	83	72
13C2-PFTeDA (surr.)	1	%	75	76	61	76
<b>Perfluoroalkyl sulfonamido substances</b>						
Perfluorooctane sulfonamide (FOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	77	67	64	59

Client Sample ID			SX_OB_20220 525_16_20_SR _Rinsate_EUF	SX_OB_20220 525_16_21_SB _Blank_EUF	SX_IB_202205 25_20_32_SR _Rinsate_EUF	SX_IB_202205 25_20_33_SB _Blank_EUF
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			M22- My0062735	M22- My0062736	M22- My0062740	M22- My0062741
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
<b>Perfluoroalkyl sulfonamido substances</b>						
D3-N-MeFOSA (surr.)	1	%	58	47	33	34
D5-N-EtFOSA (surr.)	1	%	43	55	43	47
D7-N-MeFOSE (surr.)	1	%	98	42	41	42
D9-N-EtFOSE (surr.)	1	%	83	53	54	45
D5-N-EtFOSAA (surr.)	1	%	96	64	65	49
D3-N-MeFOSAA (surr.)	1	%	16	73	20	53
<b>Perfluoroalkyl sulfonic acids (PFASs)</b>						
Perfluorobutanesulfonic acid (PFBS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) <sup>N15</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	110	101	80
18O2-PFHxS (surr.)	1	%	83	67	71	69
13C8-PFOS (surr.)	1	%	99	85	83	57
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) <sup>N11</sup>	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) <sup>N11</sup>	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	72	54	57	43
13C2-6:2 FTSA (surr.)	1	%	76	68	68	82
13C2-8:2 FTSA (surr.)	1	%	108	87	69	65
13C2-10:2 FTSA (surr.)	1	%	74	93	96	95
<b>PFASs Summations</b>						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

**Sample History**

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

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

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	May 26, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	May 26, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	May 26, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	May 26, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	May 26, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	Soil	M22-My0062729		X	X	X
2	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	Soil	M22-My0062730		X	X	X
3	SX_OB_20220525_12_03_S_S_Primary_EUF	May 25, 2022	12:03PM	Soil	M22-My0062731		X	X	X
4	SX_IB_202205	May 25, 2022	4:01PM	Soil	M22-		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_16_01_SS _Primary_EUF				My0062732				
5	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	Soil	M22- My0062733		X	X	X
6	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	Soil	M22- My0062734		X	X	X
7	SX_OB_20220 525_16_20_S R_Rinsate_EU F	May 25, 2022	4:20PM	Water	M22- My0062735			X	
8	SX_OB_20220	May 25, 2022	4:21PM	Water	M22-			X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
8	SX_OB_20220525_16_21_S B_Blank_EUF	May 25, 2022	4:21PM	Water	M22-My0062736				
9	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	Soil	M22-My0062737		X	X	X
10	SX_IB_20220525_20_03_SS_Duplicate_EUF	May 25, 2022	8:03PM	Soil	M22-My0062738		X	X	X
11	SX_OB_20220525_20_23_S S_Primary_EUF	May 25, 2022	8:23PM	Soil	M22-My0062739		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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
12	SX_IB_20220525_20_32_SR_Rinsate_EUF	May 25, 2022	8:32PM	Water	M22-My0062740			X	
13	SX_IB_20220525_20_33_SB_Blank_EUF	May 25, 2022	8:33PM	Water	M22-My0062741			X	
14	SX_OB_20220526_00_10_SS_Primary_EUF	May 26, 2022	12:10AM	Soil	M22-My0062742		X	X	X
15	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	Soil	M22-My0062743		X	X	X
16	SX_OB_20220526_04_11AM	May 26, 2022	4:11AM	Soil	M22-		X	X	X

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
16	SX_OB_20220526_04_11_S_S_Primary_EU_F	May 26, 2022	4:11AM	Soil	M22-My0062744				
17	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0062745	X		X	
18	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - pH 5.0	M22-My0062746	X		X	
19	SX_OB_20220525_12_03_S_S_Primary_EU	May 25, 2022	12:03PM	AUS Leachate - pH 5.0	M22-My0062747	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	F								
20	SX_IB_20220525_16_01_SS_Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - pH 5.0	M22-My0062748	X		X	
21	SX_OB_20220525_16_07_S_Primary_EUF	May 25, 2022	4:07PM	AUS Leachate - pH 5.0	M22-My0062749	X		X	
22	SX_OB_20220525_16_09_Duplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - pH 5.0	M22-My0062750	X		X	
23	SX_IB_20220525_20_03_SS_Primary_EUF	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062751	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
24	SX_IB_20220525_20_03_SS_Duplicate_EU_F	May 25, 2022	8:03PM	AUS Leachate - pH 5.0	M22-My0062752	X		X	
25	SX_OB_20220525_20_23_SS_Primary_EU_F	May 25, 2022	8:23PM	AUS Leachate - pH 5.0	M22-My0062753	X		X	
26	SX_OB_20220526_00_10_SS_Primary_EU_F	May 26, 2022	12:10AM	AUS Leachate - pH 5.0	M22-My0062754	X		X	
27	SX_IB_20220526_04_03_SS	May 26, 2022	4:03AM	AUS Leachate - pH 5.0	M22-My0062755	X		X	

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<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	_Primary_EUF								
28	SX_OB_20220526_04_11_S_S_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - pH 5.0	M22-My0062756	X		X	
29	SX_OB_20220525_08_11_S_S_Triplicate_EUF	May 25, 2022	8:11AM	AUS Leachate - Reagent Water	M22-My0062757	X		X	
30	SX_IB_20220525_08_16_SS_Primary_EUF	May 25, 2022	8:16AM	AUS Leachate - Reagent Water	M22-My0062758	X		X	
31	SX_OB_20220525_12_03_S	May 25, 2022	12:03PM	AUS Leachate - Reagent	M22-My0062759	X		X	

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<b>Project Name:</b>	20220526044629-Eurofin-52	<b>Phone:</b>	08 8338 1009	<b>Priority:</b>	5 Day
<b>Project ID:</b>	JC0927	<b>Fax:</b>		<b>Contact Name:</b>	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	525_12_03_S S_Primary_EU F			- Reagent Water	My0062759				
32	SX_IB_202205 25_16_01_SS _Primary_EUF	May 25, 2022	4:01PM	AUS Leachate - Reagent Water	M22- My0062760	X		X	
33	SX_OB_20220 525_16_07_S S_Primary_EU F	May 25, 2022	4:07PM	AUS Leachate - Reagent Water	M22- My0062761	X		X	
34	SX_OB_20220 525_16_09_D uplicate_EUF	May 25, 2022	4:09PM	AUS Leachate - Reagent Water	M22- My0062762	X		X	
35	SX_IB_202205	May 25, 2022	8:03PM	AUS Leachate	M22-	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
	25_20_03_SS _Primary_EUF			- Reagent Water	My0062763				
36	SX_IB_202205 25_20_03_SS _Duplicate_EU F	May 25, 2022	8:03PM	AUS Leachate - Reagent Water	M22- My0062764	X		X	
37	SX_OB_20220 525_20_23_S S_Primary_EU F	May 25, 2022	8:23PM	AUS Leachate - Reagent Water	M22- My0062765	X		X	
38	SX_OB_20220 526_00_10_S S_Primary_EU F	May 26, 2022	12:10AM	AUS Leachate - Reagent Water	M22- My0062766	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
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X	X	X	X
<b>Sydney Laboratory - NATA # 1261 Site # 18217</b>									
<b>Brisbane Laboratory - NATA # 1261 Site # 20794</b>									
<b>Mayfield Laboratory - NATA # 1261 Site # 25079</b>									
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>									
<b>External Laboratory</b>									
39	SX_IB_20220526_04_03_SS_Primary_EUF	May 26, 2022	4:03AM	AUS Leachate - Reagent Water	M22-My0062767	X		X	
40	SX_OB_20220526_04_11_S_Primary_EUF	May 26, 2022	4:11AM	AUS Leachate - Reagent Water	M22-My0062768	X		X	
<b>Test Counts</b>						24	12	40	12



## 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

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>µg/L:</b> micrograms per litre
<b>ppm:</b> parts per million	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres

### Terms

<b>APHA</b>	American Public Health Association
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	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.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.4
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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
<b>Method Blank</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonamido substances</b>						
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	
<b>Method Blank</b>						
<b>Perfluoroalkyl sulfonic acids (PFSA)</b>						
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	
<b>Method Blank</b>						
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA)</b>						
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	
<b>LCS - % Recovery</b>						
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>						
Perfluorobutanoic acid (PFBA)	%	122		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	99		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	96		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	112		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	110		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	91		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	105		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	98		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	89		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	94		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	95		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>								
Perfluorooctane sulfonamide (FOSA)	%	68			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	73			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	87			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	119			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	80			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	120			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	57			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>								
Perfluorobutanesulfonic acid (PFBS)	%	71			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	69			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	66			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	118			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	115			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	92			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	93			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	58			50-150	Pass		
<b>LCS - % Recovery</b>								
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	118			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	126			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	106			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	144			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>								
Perfluorobutanoic acid (PFBA)	M22-My0063968	NCP	%	120		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0063968	NCP	%	103		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0063968	NCP	%	84		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0063968	NCP	%	105		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0063968	NCP	%	116		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0063968	NCP	%	89		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0063968	NCP	%	59		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0063968	NCP	%	86		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0063968	NCP	%	90		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0063968	NCP	%	86		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0063968	NCP	%	98		50-150	Pass	
<b>Spike - % Recovery</b>								
<b>Perfluoroalkyl sulfonamido substances</b>								
Perfluorooctane sulfonamide (FOSA)	M22-My0063968	NCP	%	71		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0063968	NCP	%	105		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0063968	NCP	%	96		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0063968	NCP	%	108		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0063968	NCP	%	78		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-My0063968	NCP	%	48			50-150	Fail	Q08
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0063968	NCP	%	64			50-150	Pass	
<b>Spike - % Recovery</b>									
<b>Perfluoroalkyl sulfonic acids (PFSA's)</b>				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-My0063968	NCP	%	98			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0063968	NCP	%	63			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0063968	NCP	%	94			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0063968	NCP	%	100			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0063968	NCP	%	83			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0063968	NCP	%	90			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0063968	NCP	%	100			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0063968	NCP	%	59			50-150	Pass	
<b>Spike - % Recovery</b>									
<b>n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)</b>				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0063968	NCP	%	120			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0063968	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0063968	NCP	%	140			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0063968	NCP	%	144			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Perfluoroalkyl carboxylic acids (PFCAs)</b>				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0051595	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0051595	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).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

**Authorised by:**

Michael Cassidy	Analytical Services Manager
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](#).

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### CHAIN OF CUSTODY DOCUMENTATION



Australian Laboratory Services Pty Ltd

CLIENT: Agon Environmental  
 ADDRESS / OFFICE: Melbourne  
 PROJECT MANAGER (PM): Craig Trimbar  
 PROJECT ID: JC0927  
 SITE: 20220525043805-ALS-56  
 P.O. NO.:  
 RESULTS REQUIRED (Date): 5 days  
 QUOTE NO.: ME-150-19 WGTP

SAMPLER: Martha - Agon  
 Dayle B - EP Risk  
 MOBILE 1: +61 400 826 907 (Craig Trimbur)  
 MOBILE 2: +61 490 411 004 (David Lawson)  
 EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au  
 motherhublabresults1@wgtp.com.au  
 EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

FOR LABORATORY USE ONLY  
 COOLER SEAL (circle appropriate)  
 Intact: Yes No N/A  
 SAMPLE TEMPERATURE  
 CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:  
 Special Sample Prep  
 P16 plus Cr  
 PFAS 28 Extended suite  
 ASD PFAS - Extended Suite (Lab to determine pH)  
 DI Leachate PFAS - Extended Suite

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water) CONTAINER INFORMATION

14  
15  
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24

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Special Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASD PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite								
1	SX_IB_20220524_08_05_SS_Primary_ALS	S	24/05/2022	08:05	Bucket	1	X	X	X	X	X								
2	SX_IB_20220524_08_05_SS_Duplicate_ALS	S	24/05/2022	08:05	Bucket	1	X	X	X	X	X								
3	SX_OB_20220524_08_16_SS_Primary_ALS	S	24/05/2022	08:18	Bucket	1	X	X	X	X	X								
4	SX_OB_20220524_08_26_SR_Rinsate_ALS	W	24/05/2022	08:26	Bottle	1			X										
5	SX_OB_20220524_08_27_SB_Blank_ALS	W	24/05/2022	08:27	Bottle	1			X										
6	SX_OB_20220524_12_07_SS_Primary_ALS	S	24/05/2022	12:07	Bucket	1	X	X	X	X	X								
7	SX_OB_20220524_16_09_SS_Triplicate_ALS	S	24/05/2022	16:09	Bucket	1	X	X	X	X	X								
8	SX_OB_20220524_16_12_SS_Primary_ALS	S	24/05/2022	16:12	Bucket	1	X	X	X	X	X								
9	SX_OB_20220524_20_00_SS_Triplicate_ALS	S	24/05/2022	20:00	Bucket	1	X	X	X	X	X								
10	SX_OB_20220524_20_07_SS_Primary_ALS	S	24/05/2022	20:07	Bucket	1	X	X	X	X	X								
11	SX_OB_20220524_23_57_SS_Primary_ALS	S	24/05/2022	23:57	Bucket	1	X	X	X	X	X								
12	SX_IB_20220525_00_11_SS_Primary_ALS	S	25/05/2022	00:11	Bucket	1	X	X	X	X	X								
13	SX_OB_20220525_04_16_SS_Primary_ALS	S	25/05/2022	4:18	Bucket	1	X	X	X	X	X								

Environmental Division  
 Melbourne  
 Work Order Reference  
**EM2209652**



Telephone: +61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY:		METHOD OF SHIPMENT
Name: <i>D. B. ...</i>	Date: <i>25/05/22</i>	Name: <i>Martha Agon</i>	Date: <i>25/5</i>	Con' Note No:
Of: <i>EP Risk</i>	Time: <i>AM</i>	Of: <i>ML</i>	Time: <i>1035</i>	Transport Co:
Name:	Date:	Name:	Date:	
Of:	Time:	Of:	Time:	

**Water Container Codes:** P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved;  
 V = VOA Vial HCl Preserved; VG = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;  
 Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

## CERTIFICATE OF ANALYSIS

**Work Order** : **EM2209652**  
**Client** : **AGON ENVIRONMENTAL PTY LTD**  
**Contact** : Craig Trimbur  
**Address** : D1.1 63-85 TURNER STREET  
 PORT MELBOURNE 3207  
  
**Telephone** : ----  
**Project** : JC0927  
**Order number** : ----  
**C-O-C number** : 20220525043805-ALS-56  
**Sampler** : Dayle B - EP Risk, Martha - Agon  
**Site** : 20220525043805-ALS-56  
**Quote number** : EN/150/19 -WGTP -Bulk Sample Quote  
**No. of samples received** : 24  
**No. of samples analysed** : 24

**Page** : 1 of 41  
**Laboratory** : Environmental Division Melbourne  
**Contact** : Josh Alexander  
**Address** : 4 Westall Rd Springvale VIC Australia 3171  
  
**Telephone** : +61-3-8549 9600  
**Date Samples Received** : 25-May-2022 10:35  
**Date Analysis Commenced** : 26-May-2022  
**Issue Date** : 01-Jun-2022 16:51



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 Organics, 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.

- EG048G: EM2209562 #6 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- EG048G: EM2209652 #1, 2, 3, 7, 8, 9, 11 result for hexavalent chromium has been confirmed by re-preparation and re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP074-UT: Poor surrogate recoveries for EM2209652\_012 due to possible sample matrix interference. Confirmed via re-analysis.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- 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_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	96.7	108	112	112	107
13C8-PFOA	----	0.02	%	97.8	95.3	97.2	110	99.2



## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

				SX_OB_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	99.8	102	104	99.2	113
13C8-PFOA	----	0.02	%	112	92.4	110	101	102



## Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)		Sample ID		SX_OB_20220525_04 _18_SS_Primary_ALS	----	----	----	----
Sampling date / time		25-May-2022 04:18		----	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209652-013	-----	-----	-----	-----
				Result	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----



## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

SX\_OB\_20220525\_04  
 \_18\_SS\_Primary\_ALS

				Sampling date / time	---	---	---	---
Compound	CAS Number	LOR	Unit	25-May-2022 04:18	---	---	---	---
				EM2209652-013	-----	-----	-----	-----
				Result	---	---	---	---
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	---	---	---	---
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	---	---	---	---
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	---	---	---	---
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	---	---	---	---
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	---	---	---	---
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	---	---	---	---
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	---	---	---	---
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	---	---	---	---
<b>EP231P: PFAS Sums</b>								
Sum of PFAS	----	0.10	µg/L	<0.10	---	---	---	---
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	---	---	---	---
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	---	---	---	---
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	111	---	---	---	---
13C8-PFOA	----	0.02	%	107	---	---	---	---



## Analytical Results

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

Sample ID

				SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	EM2209652-018
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	EM2209652-018
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	103	110	108	106	106
13C8-PFOA	----	0.02	%	104	106	102	100	100



## Analytical Results

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

Sample ID

				SX_OB_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-019	EM2209652-020	EM2209652-021	EM2209652-022	EM2209652-023
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-019	EM2209652-020	EM2209652-021	EM2209652-022	EM2209652-023
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	110	112	113	110	104
13C8-PFOA	----	0.02	%	102	98.5	101	99.1	100



## Analytical Results

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

Sample ID

SX\_OB\_20220525\_04  
 \_18\_SS\_Primary\_ALS

Compound		CAS Number	LOR	Unit	Result				
					25-May-2022 04:18	----	----	----	----
					EM2209652-024	-----	-----	-----	-----
					Result	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----	----
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	----	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----	----



## Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)		Sample ID		SX_OB_20220525_04 _18_SS_Primary_ALS	----	----	----	----
Sampling date / time				25-May-2022 04:18	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209652-024	-----	-----	-----	-----
				Result	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	----	----	----	----
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
<b>EP231P: PFAS Sums</b>								
Sum of PFAS	----	0.10	µg/L	<0.10	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	----	----	----	----
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	104	----	----	----	----
13C8-PFOA	----	0.02	%	104	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
pH (CaCl2)	----	0.1	pH Unit	7.8	7.9	7.9	8.3	7.9
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	28.4	30.1	33.2	35.0	32.4
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	20	21	47	52	57
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	94	114	112	116	115
Copper	7440-50-8	5	mg/kg	56	63	54	47	64
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	142	164	141	116	159
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	88	97	84	75	97
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	1.6	1.4	1.2	<1.0	1.0
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
<b>EK040T: Fluoride Total</b>								
Fluoride	16984-48-8	100	mg/kg	220	220	180	160	150
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Initial pH	----	0.1	pH Unit	9.3	9.2	8.7	9.1	8.7
After HCl pH	----	0.1	pH Unit	1.4	1.4	1.4	1.5	1.4
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
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
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_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP074A: Monocyclic Aromatic Hydrocarbons - Continued</b>								
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
<b>EP074H: Naphthalene</b>								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
<b>EP074I: Volatile Halogenated Compounds</b>								
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
<b>EP075A: Phenolic Compounds (Halogenated)</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated) - Continued</b>								
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
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
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
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
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

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 (Matrix: SOIL)

Sample ID

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Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
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	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>EP075I: Organochlorine Pesticides</b>								
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

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Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP075I: Organochlorine Pesticides - Continued</b>								
^ 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
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
>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
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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



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 (Matrix: SOIL)

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Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS	SX_OB_20220524_16_09_SS_Triplicate_ALS
Sampling date / time				24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
Compound	CAS Number	LOR	Unit	EM2209652-001	EM2209652-002	EM2209652-003	EM2209652-006	EM2209652-007
				Result	Result	Result	Result	Result
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP066S: PCB Surrogate</b>								
Decachlorobiphenyl	2051-24-3	0.1	%	79.6	82.2	92.6	83.4	79.8
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	93.2	85.6	87.8	87.4	82.0
Toluene-D8	2037-26-5	0.1	%	95.5	85.6	89.2	86.7	83.4
4-Bromofluorobenzene	460-00-4	0.1	%	108	96.3	98.6	96.3	95.0
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>								
Phenol-d6	13127-88-3	0.025	%	82.6	92.6	101	88.0	87.5
2-Chlorophenol-D4	93951-73-6	0.025	%	81.6	89.4	98.2	87.8	87.2
2,4,6-Tribromophenol	118-79-6	0.025	%	71.6	78.1	81.9	74.1	78.5
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>								
Nitrobenzene-D5	4165-60-0	0.025	%	83.6	91.3	100.0	89.1	88.2
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	83.0	90.0	100	88.9	88.2
2-Fluorobiphenyl	321-60-8	0.025	%	93.5	101	109	98.0	96.1
Anthracene-d10	1719-06-8	0.025	%	80.8	88.0	96.0	86.9	84.4
4-Terphenyl-d14	1718-51-0	0.025	%	91.2	100	108	98.5	95.9
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.0002	%	119	98.6	100	111	101
13C8-PFOA	----	0.0002	%	113	103	116	113	103



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220524_16 _12_SS_Primary_ALS	SX_OB_20220524_20 _00_SS_Triplicate_AL S	SX_OB_20220524_20 _07_SS_Primary_ALS	SX_OB_20220524_23 _57_SS_Primary_ALS	SX_IB_20220525_00_ 11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
pH (CaCl2)	----	0.1	pH Unit	7.9	8.2	7.9	7.8	8.0
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	30.8	33.3	35.4	32.2	31.8
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	48	46	52	49	47
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	103	108	121	115	101
Copper	7440-50-8	5	mg/kg	45	47	65	61	57
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	113	111	158	150	162
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	70	72	96	91	92
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	1.1	1.0	<1.0	1.0	<1.0
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
<b>EK040T: Fluoride Total</b>								
Fluoride	16984-48-8	100	mg/kg	150	140	140	160	160
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Initial pH	----	0.1	pH Unit	8.7	8.8	8.8	8.5	9.3
After HCl pH	----	0.1	pH Unit	1.3	1.4	1.3	1.4	1.5
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.0	5.1	5.0	5.1	5.1
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP074A: Monocyclic Aromatic Hydrocarbons - Continued</b>								
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
<b>EP074H: Naphthalene</b>								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
<b>EP074I: Volatile Halogenated Compounds</b>								
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
<b>EP075A: Phenolic Compounds (Halogenated)</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated) - Continued</b>								
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
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
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
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
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	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>EP075I: Organochlorine Pesticides</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP075I: Organochlorine Pesticides - Continued</b>								
^ 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
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
>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
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids - Continued</b>								
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP066S: PCB Surrogate</b>								
Decachlorobiphenyl	2051-24-3	0.1	%	80.3	82.2	79.4	84.7	81.8
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	82.8	79.8	102	90.2	78.9
Toluene-D8	2037-26-5	0.1	%	84.1	79.1	101	88.8	30.6
4-Bromofluorobenzene	460-00-4	0.1	%	95.1	90.0	112	101	41.4
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>								
Phenol-d6	13127-88-3	0.025	%	86.5	87.4	86.2	86.1	93.1
2-Chlorophenol-D4	93951-73-6	0.025	%	84.3	86.8	85.3	85.4	89.3
2,4,6-Tribromophenol	118-79-6	0.025	%	69.8	71.6	71.1	69.7	76.1
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>								
Nitrobenzene-D5	4165-60-0	0.025	%	85.1	87.7	86.7	86.1	91.9
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	85.6	88.1	86.2	86.6	88.7
2-Fluorobiphenyl	321-60-8	0.025	%	93.5	95.8	94.8	94.6	99.3
Anthracene-d10	1719-06-8	0.025	%	81.4	84.6	82.5	82.2	86.3
4-Terphenyl-d14	1718-51-0	0.025	%	93.3	94.7	94.1	94.1	97.8



### Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220524_16 _12_SS_Primary_ALS	SX_OB_20220524_20 _00_SS_Triplicate_AL S	SX_OB_20220524_20 _07_SS_Primary_ALS	SX_OB_20220524_23 _57_SS_Primary_ALS	SX_IB_20220525_00_ 11_SS_Primary_ALS
Sampling date / time				24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	CAS Number	LOR	Unit	EM2209652-008	EM2209652-009	EM2209652-010	EM2209652-011	EM2209652-012
				Result	Result	Result	Result	Result
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.0002	%	92.8	120	106	99.7	79.2
13C8-PFOA	----	0.0002	%	98.8	116	121	106	84.6



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Sample ID			SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
		Sampling date / time			25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	
				Result	Result	Result	Result	Result	
<b>EA001: pH in soil using 0.01M CaCl extract</b>									
pH (CaCl <sub>2</sub> )	----	0.1	pH Unit	7.9	----	----	----	----	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%	31.1	----	----	----	----	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Arsenic	7440-38-2	5	mg/kg	43	----	----	----	----	
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----	
Chromium	7440-47-3	5	mg/kg	96	----	----	----	----	
Copper	7440-50-8	5	mg/kg	58	----	----	----	----	
Lead	7439-92-1	5	mg/kg	<5	----	----	----	----	
Molybdenum	7439-98-7	5	mg/kg	<5	----	----	----	----	
Nickel	7440-02-0	5	mg/kg	132	----	----	----	----	
Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----	
Silver	7440-22-4	2	mg/kg	<2	----	----	----	----	
Tin	7440-31-5	10	mg/kg	<10	----	----	----	----	
Zinc	7440-66-6	5	mg/kg	77	----	----	----	----	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>									
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	----	----	----	----	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>									
Total Cyanide	57-12-5	5	mg/kg	<5	----	----	----	----	
<b>EK040T: Fluoride Total</b>									
Fluoride	16984-48-8	100	mg/kg	180	----	----	----	----	
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>									
Initial pH	----	0.1	pH Unit	9.0	----	----	----	----	
After HCl pH	----	0.1	pH Unit	1.4	----	----	----	----	
Extraction Fluid pH	----	0.1	pH Unit	5.0	----	----	----	----	
Final pH	----	0.1	pH Unit	5.1	----	----	----	----	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>									
Final pH	----	0.1	pH Unit	----	9.4	9.6	9.3	10.0	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	
				Result	Result	Result	Result	Result	
<b>EP074A: Monocyclic Aromatic Hydrocarbons - Continued</b>									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----	
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----	
Styrene	100-42-5	0.5	mg/kg	<0.5	----	----	----	----	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----	
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----	
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----	
<b>EP074H: Naphthalene</b>									
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----	
<b>EP074I: Volatile Halogenated Compounds</b>									
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	----	----	----	----	
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	----	----	----	----	
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	----	----	----	----	
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	----	----	----	----	
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	----	----	----	----	
Chloroform	67-66-3	0.50	mg/kg	<0.50	----	----	----	----	
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	----	----	----	----	
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	----	----	----	----	
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	----	----	----	----	
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	----	----	----	----	
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	----	----	----	----	
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	----	----	----	----	
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	----	----	----	----	
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	----	----	----	----	
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	----	----	----	----	
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	----	----	----	----	
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	----	----	----	----	
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	----	----	----	----	
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	----	----	----	----	
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	----	----	----	----	
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	----	----	----	----	
<b>EP075A: Phenolic Compounds (Halogenated)</b>									



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated) - Continued</b>								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	----	----	----	----
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	----	----	----	----
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	----	----	----	----
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	----	----	----	----
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	----	----	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	----	----	----	----
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	----	----	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	----	----	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
Phenol	108-95-2	1	mg/kg	<1	----	----	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	----	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	----	----	----	----
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	----	----	----	----
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	----	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	----	----	----	----
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	----	----	----	----
Dinoseb	88-85-7	20	mg/kg	<20	----	----	----	----
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	----	----	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	<b>0.6</b>	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	----	----	----	----
<b>EP075I: Organochlorine Pesticides</b>								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	----	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	----	----	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	----	----	----	----





## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017
				Result	Result	Result	Result	Result
<b>EP075I: Organochlorine Pesticides - Continued</b>								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	----	----	----	----
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	----	----	----	----
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
C6 - C9 Fraction	----	20	mg/kg	<20	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	----	----	----	----
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	
				Result	Result	Result	Result	Result	
<b>EP231B: Perfluoroalkyl Carboxylic Acids - Continued</b>									
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	----	----	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	----	----	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	----	----	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	----	----	----	----	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	----	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	----	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	----	----	----	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	----	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	----	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	----	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	----	----	----	----	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	----	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS	SX_OB_20220524_08_18_SS_Primary_ALS	SX_OB_20220524_12_07_SS_Primary_ALS
Sampling date / time				25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
Compound	CAS Number	LOR	Unit	EM2209652-013	EM2209652-014	EM2209652-015	EM2209652-016	EM2209652-017	
				Result	Result	Result	Result	Result	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued</b>									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	----	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	----	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	----	----	----	----	
<b>EP231P: PFAS Sums</b>									
Sum of PFAS	----	50.0	µg/kg	<50.0	----	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	----	----	----	----	
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	----	----	----	----	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	86.1	----	----	----	----	
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	84.2	----	----	----	----	
Toluene-D8	2037-26-5	0.1	%	77.3	----	----	----	----	
4-Bromofluorobenzene	460-00-4	0.1	%	78.2	----	----	----	----	
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>									
Phenol-d6	13127-88-3	0.025	%	97.1	----	----	----	----	
2-Chlorophenol-D4	93951-73-6	0.025	%	95.3	----	----	----	----	
2,4,6-Tribromophenol	118-79-6	0.025	%	79.4	----	----	----	----	
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>									
Nitrobenzene-D5	4165-60-0	0.025	%	97.8	----	----	----	----	
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	94.6	----	----	----	----	
2-Fluorobiphenyl	321-60-8	0.025	%	106	----	----	----	----	
Anthracene-d10	1719-06-8	0.025	%	91.9	----	----	----	----	
4-Terphenyl-d14	1718-51-0	0.025	%	104	----	----	----	----	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.0002	%	102	----	----	----	----	
13C8-PFOA	----	0.0002	%	94.8	----	----	----	----	



**Analytical Results**

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220524_16_09_SS_Triplicate_ALS	SX_OB_20220524_16_12_SS_Primary_ALS	SX_OB_20220524_20_00_SS_Triplicate_ALS	SX_OB_20220524_20_07_SS_Primary_ALS	SX_OB_20220524_23_57_SS_Primary_ALS
Sampling date / time				24-May-2022 16:09	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57
Compound	CAS Number	LOR	Unit	EM2209652-018	EM2209652-019	EM2209652-020	EM2209652-021	EM2209652-022
				Result	Result	Result	Result	Result
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Final pH	----	0.1	pH Unit	9.4	9.3	9.4	9.3	9.0



**Analytical Results**

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220525_00_11_SS_Primary_ALS	SX_OB_20220525_04_18_SS_Primary_ALS	----	----	----
Sampling date / time				25-May-2022 00:11	25-May-2022 04:18	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209652-023	EM2209652-024	-----	-----	-----	
				Result	Result	---	---	---	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>									
Final pH	----	0.1	pH Unit	9.9	9.7	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		SX_OB_20220524_08 _26_SR_Rinsate_ALS	SX_OB_20220524_08 _27_SB_Blank_ALS	----	----	----
			Sampling date / time		24-May-2022 08:26	24-May-2022 08:27	----	----	----
Compound	CAS Number	LOR	Unit	EM2209652-004	EM2209652-005	-----	-----	-----	
				Result	Result	---	---	---	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.10	µg/L	<0.10	<0.10	----	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220524_08 _26_SR_Rinsate_ALS	SX_OB_20220524_08 _27_SB_Blank_ALS	----	----	----
Sampling date / time				24-May-2022 08:26	24-May-2022 08:27	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209652-004	EM2209652-005	-----	-----	-----	
				Result	Result	---	---	---	
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231P: PFAS Sums</b>									
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.02	%	88.9	96.3	----	----	----	
13C8-PFOA	----	0.02	%	98.3	94.0	----	----	----	



## Surrogate Control Limits

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

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

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP066S: PCB Surrogate</b>			
Decachlorobiphenyl	2051-24-3	41	122
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>			
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
<b>EP231S: PFAS Surrogate</b>			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

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



## Automated Guideline Comparison Report

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

<b>Work Order</b>	: <b>EM2209652</b>	Page	: 1 of 33
Client	: <b>AGON ENVIRONMENTAL PTY LTD</b>	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: Craig.Trimbur@eprisk.com.au	E-mail	: Josh.Alexander@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 25-May-2022 10:35
Order number	: ----	Date Analysed	: 26-May-2022
C-O-C number	: 20220525043805-ALS-56	Date Issued	: 01-Jun-2022 16:52
No. of samples received	: 24		
No. of samples analysed	: 24	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

#### **General Comments**

This guideline comparison report **only** provides comparison of total concentration data against upper limit thresholds for the 'Fill Material', 'C', 'B' Categories in Table 2 of EPA Publication IWRG621.

This guideline comparison report is **NOT** a soil classification report. Classification of soils as Fill Material, Category C, Category B or Category A requires consideration of a number of other factors including preliminary site investigation, sampling density and statistical calculations, as set out in EPA Publication IWRG 702 and measurement uncertainty.

This guideline comparison report only provides comparison data for parameters, specifically listed within the IWRG621 (2009) guideline, that are analysed by ALS.

Only results in the 'Analytical Results' section have been compared to the guideline.

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



## Summary of Thresholds Reached or Exceeded

EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_IB_20220524_08_05_S S_Primary_ALS	EM2209652-001	Arsenic	EG005T	5	< 20 mg/kg	20 mg/kg
SX_IB_20220524_08_05_S S_Primary_ALS	EM2209652-001	Nickel	EG005T	5	< 60 mg/kg	142 mg/kg
SX_IB_20220524_08_05_S S_Primary_ALS	EM2209652-001	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.6 mg/kg
SX_IB_20220524_08_05_S S_Duplicate_ALS	EM2209652-002	Arsenic	EG005T	5	< 20 mg/kg	21 mg/kg
SX_IB_20220524_08_05_S S_Duplicate_ALS	EM2209652-002	Nickel	EG005T	5	< 60 mg/kg	164 mg/kg
SX_IB_20220524_08_05_S S_Duplicate_ALS	EM2209652-002	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.4 mg/kg
SX_OB_20220524_08_18_SS SS_Primary_ALS	EM2209652-003	Arsenic	EG005T	5	< 20 mg/kg	47 mg/kg
SX_OB_20220524_08_18_SS SS_Primary_ALS	EM2209652-003	Nickel	EG005T	5	< 60 mg/kg	141 mg/kg
SX_OB_20220524_08_18_SS SS_Primary_ALS	EM2209652-003	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.2 mg/kg
SX_OB_20220524_12_07_SS SS_Primary_ALS	EM2209652-006	Arsenic	EG005T	5	< 20 mg/kg	52 mg/kg
SX_OB_20220524_12_07_SS SS_Primary_ALS	EM2209652-006	Nickel	EG005T	5	< 60 mg/kg	116 mg/kg
SX_OB_20220524_16_09_SS SS_Triplicate_ALS	EM2209652-007	Arsenic	EG005T	5	< 20 mg/kg	57 mg/kg
SX_OB_20220524_16_09_SS SS_Triplicate_ALS	EM2209652-007	Nickel	EG005T	5	< 60 mg/kg	159 mg/kg
SX_OB_20220524_16_09_SS SS_Triplicate_ALS	EM2209652-007	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.0 mg/kg
SX_OB_20220524_16_12_SS SS_Primary_ALS	EM2209652-008	Arsenic	EG005T	5	< 20 mg/kg	48 mg/kg
SX_OB_20220524_16_12_SS SS_Primary_ALS	EM2209652-008	Nickel	EG005T	5	< 60 mg/kg	113 mg/kg
SX_OB_20220524_16_12_SS SS_Primary_ALS	EM2209652-008	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.1 mg/kg
SX_OB_20220524_20_00_SS SS_Triplicate_ALS	EM2209652-009	Arsenic	EG005T	5	< 20 mg/kg	46 mg/kg
SX_OB_20220524_20_00_SS SS_Triplicate_ALS	EM2209652-009	Nickel	EG005T	5	< 60 mg/kg	111 mg/kg



**EPA Victoria Publication IWRG 621 (2009)**

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

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_OB_20220524_20_00 SS_Triplicate_ALS	EM2209652-009	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.0 mg/kg
SX_OB_20220524_20_07 SS_Primary_ALS	EM2209652-010	Arsenic	EG005T	5	< 20 mg/kg	52 mg/kg
SX_OB_20220524_20_07 SS_Primary_ALS	EM2209652-010	Nickel	EG005T	5	< 60 mg/kg	158 mg/kg
SX_OB_20220524_23_57 SS_Primary_ALS	EM2209652-011	Arsenic	EG005T	5	< 20 mg/kg	49 mg/kg
SX_OB_20220524_23_57 SS_Primary_ALS	EM2209652-011	Nickel	EG005T	5	< 60 mg/kg	150 mg/kg
SX_OB_20220524_23_57 SS_Primary_ALS	EM2209652-011	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.0 mg/kg
SX_IB_20220525_00_11_S S_Primary_ALS	EM2209652-012	Arsenic	EG005T	5	< 20 mg/kg	47 mg/kg
SX_IB_20220525_00_11_S S_Primary_ALS	EM2209652-012	Nickel	EG005T	5	< 60 mg/kg	162 mg/kg
SX_OB_20220525_04_18 SS_Primary_ALS	EM2209652-013	Arsenic	EG005T	5	< 20 mg/kg	43 mg/kg
SX_OB_20220525_04_18 SS_Primary_ALS	EM2209652-013	Nickel	EG005T	5	< 60 mg/kg	132 mg/kg



## Analytical Results

### Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		Guideline Lower Limit	Guideline Upper Limit	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Sampling date/time				524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
								S_Primary_AL S	S_Duplicate_ ALS	S_Primary_AL S	S_Primary_AL S	S_Triplicate_ ALS
							24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09	
							EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>												
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5		7.8 ± 0.1	7.9 ± 0.1	7.9 ± 0.1	8.3 ± 0.1	7.9 ± 0.1	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>												
Arsenic	EG005T	5	mg/kg	----	2000		20 ± 3	21 ± 3	47 ± 6	52 ± 7	57 ± 7	
Cadmium	EG005T	1	mg/kg	----	400		<1 --	1 ± 0.2	<1 --	<1 --	<1 --	
Copper	EG005T	5	mg/kg	----	20000		56 ± 7	63 ± 8	54 ± 6	47 ± 6	64 ± 8	
Lead	EG005T	5	mg/kg	----	6000		<5 --	<5 --	<5 --	<5 --	<5 --	
Molybdenum	EG005T	5	mg/kg	----	4000		<5 --	<5 --	<5 --	<5 --	<5 --	
Nickel	EG005T	5	mg/kg	----	12000		142 ± 14	164 ± 16	141 ± 14	116 ± 11	159 ± 16	
Selenium	EG005T	5	mg/kg	----	200		<5 --	<5 --	<5 --	<5 --	<5 --	
Silver	EG005T	2	mg/kg	----	720		<2 --	<2 --	<2 --	<2 --	<2 --	
Zinc	EG005T	5	mg/kg	----	140000		88 ± 10	97 ± 11	84 ± 9	75 ± 8	97 ± 11	
<b>EG035T: Total Recoverable Mercury by FIMS</b>												
Mercury	EG035T	0.1	mg/kg	----	300		<0.1 --	<0.1 --	<0.1 --	<0.1 --	<0.1 --	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>												
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000		1.6 ± 0.3	1.4 ± 0.3	1.2 ± 0.2	<1.0 --	1.0 ± 0.2	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>												
Total Cyanide	EK026SF	5	mg/kg	----	10000		<5 --	<5 --	<5 --	<5 --	<5 --	
<b>EK040T: Fluoride Total</b>												
Fluoride	EK040T	100	mg/kg	----	40000		220 ± 40	220 ± 40	180 ± 40	160 ± 40	150 ± 40	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>												
Benzene	EP074-UT	0.2	mg/kg	----	16		<0.2 --	<0.2 --	<0.2 --	<0.2 --	<0.2 --	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240		<0.5 --	<0.5 --	<0.5 --	<0.5 --	<0.5 --	
<b>EP074I: Volatile Halogenated Compounds</b>												
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8		<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11		<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50		<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --	
<b>EP075A: Phenolic Compounds (Halogenated)</b>												
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320		<1.00 --	<1.00 --	<1.00 --	<1.00 --	<1.00 --	



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS
				Lower Limit	Upper Limit	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
						EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS
				Guideline	Guideline	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
						EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ± 0.1	7.9 ± 0.1	7.9 ± 0.1	8.3 ± 0.1	7.9 ± 0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	500	20 ± 3	21 ± 3	47 ± 6	52 ± 7	57 ± 7
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	1 ± 0.2	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	56 ± 7	63 ± 8	54 ± 6	47 ± 6	64 ± 8
Lead	EG005T	5	mg/kg	----	1500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	1000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	3000	142 ± 14	164 ± 16	141 ± 14	116 ± 11	159 ± 16
Selenium	EG005T	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	180	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	500	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	35000	88 ± 10	97 ± 11	84 ± 9	75 ± 8	97 ± 11
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	1.6 ± 0.3	1.4 ± 0.3	1.2 ± 0.2	<1.0 ..	1.0 ± 0.2
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	10000	220 ± 40	220 ± 40	180 ± 40	160 ± 40	150 ± 40
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS
				Lower Limit	Upper Limit	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
						EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS
				Guideline	Guideline	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
						EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ±0.1	7.9 ±0.1	7.9 ±0.1	8.3 ±0.1	7.9 ±0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	20	20 ±3	21 ±3	47 ±6	52 ±7	57 ±7
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	1 ±0.2	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	56 ±7	63 ±8	54 ±6	47 ±6	64 ±8
Lead	EG005T	5	mg/kg	----	300	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	40	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	60	142 ±14	164 ±16	141 ±14	116 ±11	159 ±16
Selenium	EG005T	5	mg/kg	----	10	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	10	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	50	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	200	88 ±10	97 ±11	84 ±9	75 ±8	97 ±11
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	1.6 ±0.3	1.4 ±0.3	1.2 ±0.2	<1.0 ..	1.0 ±0.2
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	450	220 ±40	220 ±40	180 ±40	160 ±40	150 ±40
<b>EP066: Polychlorinated Biphenyls (PCB)</b>										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										





**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S	524_16_09_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Triplicate_ALS
				Lower Limit	Upper Limit	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	24-May-2022 16:09
						EM2209652-001 MU	EM2209652-002 MU	EM2209652-003 MU	EM2209652-006 MU	EM2209652-007 MU
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S	525_00_11_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
						EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.9 ± 0.1	8.2 ± 0.1	7.9 ± 0.1	7.8 ± 0.1	8.0 ± 0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	2000	48 ± 6	46 ± 6	52 ± 7	49 ± 6	47 ± 6
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	20000	45 ± 6	47 ± 6	65 ± 8	61 ± 7	57 ± 7
Lead	EG005T	5	mg/kg	----	6000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	4000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	12000	113 ± 11	111 ± 11	158 ± 16	150 ± 15	162 ± 16
Selenium	EG005T	5	mg/kg	----	200	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	720	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Zinc	EG005T	5	mg/kg	----	140000	70 ± 8	72 ± 8	96 ± 11	91 ± 10	92 ± 10
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	1.1 ± 0.2	1.0 ± 0.2	<1.0 ..	1.0 ± 0.2	<1.0 ..
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	40000	150 ± 40	140 ± 30	140 ± 40	160 ± 40	160 ± 40
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S	525_00_11_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
						EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

				Sample ID		SX_OB_20220 524_16_12_S S_Primary_AL S	SX_OB_20220 524_20_00_S S_Triplicate ALS	SX_OB_20220 524_20_07_S S_Primary_AL S	SX_OB_20220 524_23_57_S S_Primary_AL S	SX_IB_20220 525_00_11_S S_Primary_AL S
Sampling date/time				Guideline	Guideline	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
Compound	Method	LOR	Unit	Lower Limit	Upper Limit	EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	8.2 ± 0.1	7.9 ± 0.1	7.8 ± 0.1	8.0 ± 0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	500	48 ± 6	46 ± 6	52 ± 7	49 ± 6	47 ± 6
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	45 ± 6	47 ± 6	65 ± 8	61 ± 7	57 ± 7
Lead	EG005T	5	mg/kg	----	1500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	1000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	3000	113 ± 11	111 ± 11	158 ± 16	150 ± 15	162 ± 16
Selenium	EG005T	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	180	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	500	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	35000	70 ± 8	72 ± 8	96 ± 11	91 ± 10	92 ± 10
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	1.1 ± 0.2	1.0 ± 0.2	<1.0 ..	1.0 ± 0.2	<1.0 ..
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	10000	150 ± 40	140 ± 30	140 ± 40	160 ± 40	160 ± 40
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S	525_00_11_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
						EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S	525_00_11_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
						EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	8.2 ± 0.1	7.9 ± 0.1	7.8 ± 0.1	8.0 ± 0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	20	48 ± 6	46 ± 6	52 ± 7	49 ± 6	47 ± 6
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	45 ± 6	47 ± 6	65 ± 8	61 ± 7	57 ± 7
Lead	EG005T	5	mg/kg	----	300	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	40	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	60	113 ± 11	111 ± 11	158 ± 16	150 ± 15	162 ± 16
Selenium	EG005T	5	mg/kg	----	10	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	10	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	50	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	200	70 ± 8	72 ± 8	96 ± 11	91 ± 10	92 ± 10
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	1.1 ± 0.2	1.0 ± 0.2	<1.0 ..	1.0 ± 0.2	<1.0 ..
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	450	150 ± 40	140 ± 30	140 ± 40	160 ± 40	160 ± 40
<b>EP066: Polychlorinated Biphenyls (PCB)</b>										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S	525_00_11_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57	25-May-2022 00:11
						EM2209652-008 MU	EM2209652-009 MU	EM2209652-010 MU	EM2209652-011 MU	EM2209652-012 MU
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.9 ± 0.1	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	2000	43 ± 6	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	400	<1 --	----	----	----	----
Copper	EG005T	5	mg/kg	----	20000	58 ± 7	----	----	----	----
Lead	EG005T	5	mg/kg	----	6000	<5 --	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	4000	<5 --	----	----	----	----
Nickel	EG005T	5	mg/kg	----	12000	132 ± 13	----	----	----	----
Selenium	EG005T	5	mg/kg	----	200	<5 --	----	----	----	----
Silver	EG005T	2	mg/kg	----	720	<2 --	----	----	----	----
Zinc	EG005T	5	mg/kg	----	140000	77 ± 9	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 --	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 --	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 --	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	40000	180 ± 40	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 --	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 --	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 --	----	----	----	----
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 --	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 --	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										





**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
							S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU	
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>											
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5	--	----	----	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5	--	----	----	----	
<b>EP075I: Organochlorine Pesticides</b>											
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05	--	----	----	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30	--	----	----	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	----	----	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10	--	----	----	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03	--	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>											
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20	--	----	----	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50	--	----	----	----	



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	----	----	----	----
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	500	43 ± 6	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	100	<1 --	----	----	----	----
Copper	EG005T	5	mg/kg	----	5000	58 ± 7	----	----	----	----
Lead	EG005T	5	mg/kg	----	1500	<5 --	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	1000	<5 --	----	----	----	----
Nickel	EG005T	5	mg/kg	----	3000	132 ± 13	----	----	----	----
Selenium	EG005T	5	mg/kg	----	50	<5 --	----	----	----	----
Silver	EG005T	2	mg/kg	----	180	<2 --	----	----	----	----
Tin	EG005T	10	mg/kg	----	500	<10 --	----	----	----	----
Zinc	EG005T	5	mg/kg	----	35000	77 ± 9	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 --	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 --	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 --	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	10000	180 ± 40	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 --	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 --	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 --	----	----	----	----
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 --	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 --	----	----	----	----



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
							S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU	
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>											
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	--	----	----	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	--	----	----	----	
<b>EP075I: Organochlorine Pesticides</b>											
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	--	----	----	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	--	----	----	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	----	----	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	--	----	----	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	--	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>											
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	--	----	----	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	--	----	----	----	



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
							S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07	
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	----	----	----	----	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>											
Arsenic	EG005T	5	mg/kg	----	20	43 ± 6	----	----	----	----	
Cadmium	EG005T	1	mg/kg	----	3	<1 --	----	----	----	----	
Copper	EG005T	5	mg/kg	----	100	58 ± 7	----	----	----	----	
Lead	EG005T	5	mg/kg	----	300	<5 --	----	----	----	----	
Molybdenum	EG005T	5	mg/kg	----	40	<5 --	----	----	----	----	
Nickel	EG005T	5	mg/kg	----	60	132 ± 13	----	----	----	----	
Selenium	EG005T	5	mg/kg	----	10	<5 --	----	----	----	----	
Silver	EG005T	2	mg/kg	----	10	<2 --	----	----	----	----	
Tin	EG005T	10	mg/kg	----	50	<10 --	----	----	----	----	
Zinc	EG005T	5	mg/kg	----	200	77 ± 9	----	----	----	----	
<b>EG035T: Total Recoverable Mercury by FIMS</b>											
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 --	----	----	----	----	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 --	----	----	----	----	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>											
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 --	----	----	----	----	
<b>EK040T: Fluoride Total</b>											
Fluoride	EK040T	100	mg/kg	----	450	180 ± 40	----	----	----	----	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>											
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 --	----	----	----	----	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>											
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 --	----	----	----	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 --	----	----	----	----	
<b>EP074I: Volatile Halogenated Compounds</b>											
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Halogenated)</b>											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 --	----	----	----	----	



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220
				Sampling date/time		525_04_18_S	524_08_05_S	524_08_05_S	524_08_18_S	524_12_07_S
				Lower Limit	Upper Limit	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
						25-May-2022 04:18	24-May-2022 08:05	24-May-2022 08:05	24-May-2022 08:18	24-May-2022 12:07
						EM2209652-013 MU	EM2209652-014 MU	EM2209652-015 MU	EM2209652-016 MU	EM2209652-017 MU
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5	----	----	----	----
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20	----	----	----	----
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50	----	----	----	----



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	524_16_09_S	524_16_12_S	524_20_00_S	524_20_07_S	524_23_57_S
						S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	24-May-2022 16:09	24-May-2022 16:12	24-May-2022 20:00	24-May-2022 20:07	25-May-2022 23:57
						EM2209652-018 MU	EM2209652-019 MU	EM2209652-020 MU	EM2209652-021 MU	EM2209652-022 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										















**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 525_00_11_S S_Primary_AL S	SX_OB_20220 525_04_18_S S_Primary_AL S	----	----	----
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						25-May-2022 00:11	25-May-2022 04:18	----	----	----
						EM2209652-023 MU	EM2209652-024 MU			
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										













## QUALITY CONTROL REPORT

<b>Work Order</b>	: <b>EM2209652</b>	<b>Page</b>	: 1 of 31
<b>Client</b>	: <b>AGON ENVIRONMENTAL PTY LTD</b>	<b>Laboratory</b>	: Environmental Division Melbourne
<b>Contact</b>	: Craig Trimbur	<b>Contact</b>	: Josh Alexander
<b>Address</b>	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	<b>Address</b>	: 4 Westall Rd Springvale VIC Australia 3171
<b>Telephone</b>	: ----	<b>Telephone</b>	: +61-3-8549 9600
<b>Project</b>	: JC0927	<b>Date Samples Received</b>	: 25-May-2022
<b>Order number</b>	: ----	<b>Date Analysis Commenced</b>	: 26-May-2022
<b>C-O-C number</b>	: 20220525043805-ALS-56	<b>Issue Date</b>	: 01-Jun-2022
<b>Sampler</b>	: Dayle B - EP Risk, Martha - Agon		
<b>Site</b>	: 20220525043805-ALS-56		
<b>Quote number</b>	: EN/150/19 -WGTP -Bulk Sample Quote		
<b>No. of samples received</b>	: 24		
<b>No. of samples analysed</b>	: 24		



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 Organics, 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 (%)
<b>EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4364841)</b>									
EM2209562-003	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	9	8	0.0	No Limit
EM2209562-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	16	14	11.2	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	27	23	17.9	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	16	48.4	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	75	49	42.0	0% - 50%
EM2209652-008	SX_OB_20220524_16_12_ 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	103	112	8.8	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	113	134	17.1	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	48	79	48.9	0% - 50%
		EG005T: Copper	7440-50-8	5	mg/kg	45	65	35.4	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	70	76	9.1	0% - 50%		

**EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4368086)**



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 (%)
<b>EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4368086) - continued</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	8.0	2.8	0% - 20%
EM2209652-012	SX_IB_20220525_00_11_S S_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	8.0	7.9	0.0	0% - 20%
<b>EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4367665)</b>									
EM2209235-009	Anonymous	EA055: Moisture Content	----	0.1	%	2.8	3.1	12.5	No Limit
EM2209652-011	SX_OB_20220524_23_57_ SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	32.2	31.8	1.4	0% - 20%
<b>EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4364842)</b>									
EM2209562-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209652-008	SX_OB_20220524_16_12_ SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4366398)</b>									
EM2209562-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
<b>EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4368414)</b>									
EM2209652-006	SX_OB_20220524_12_07_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2209562-003	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
<b>EK040T: Fluoride Total (QC Lot: 4366402)</b>									
EM2209562-003	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	480	360	28.0	0% - 50%
EM2209652-006	SX_OB_20220524_12_07_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	160	150	0.0	No Limit
<b>EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4364701)</b>									
EM2209562-003	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4361803)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_ 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



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 (%)
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4361803) - continued</b>									
EM2209652-013	SX_OB_20220525_04_18_SS_Primary_ALS	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
<b>EP074H: Naphthalene (QC Lot: 4361803)</b>									
EM2209652-001	SX_IB_20220524_08_05_S_S_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
<b>EP074I: Volatile Halogenated Compounds (QC Lot: 4361803)</b>									
EM2209652-001	SX_IB_20220524_08_05_S_S_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		
EM2209652-013	SX_OB_20220525_04_18_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



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 (%)
<b>EP074I: Volatile Halogenated Compounds (QC Lot: 4361803) - continued</b>									
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	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		
<b>EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4364700)</b>									
EM2209562-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ 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
<b>EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4364700)</b>									
EM2209562-003	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4364700) - continued</b>									
EM2209562-003	Anonymous	EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<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		
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4364700)</b>									
EM2209562-003	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit		



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 (%)
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4364700) - continued</b>									
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	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
<b>EP075I: Organochlorine Pesticides (QC Lot: 4364700)</b>									
EM2209652-003	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ 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





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 (%)
<b>EP075I: Organochlorine Pesticides (QC Lot: 4364700) - continued</b>									
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	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		
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4361803)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4364702)</b>									
EM2209562-003	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4361803)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_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
EM2209652-013	SX_OB_20220525_04_18_ 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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4364702)</b>									
EM2209562-003	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit



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 (%)
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4364702) - continued</b>									
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4369982)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		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
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	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
		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
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	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: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4369982) - continued</b>									
EM2209652-013	SX_OB_20220525_04_18_SS_Primary_ALS	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
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4369982)</b>									
EM2209652-001	SX_IB_20220524_08_05_S_S_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4369982)</b>									
EM2209652-001	SX_IB_20220524_08_05_S_S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit



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 (%)
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4369982) - continued</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	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
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
<b>EP231P: PFAS Sums (QC Lot: 4369982)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
EM2209652-013	SX_OB_20220525_04_18_ SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4370997)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ 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		



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 (%)
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4370999)</b>									
EM2209652-014	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209652-021	SX_OB_20220524_20_07_ 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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4372855)</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_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
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4370997)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4370997) - continued</b>									
EM2209652-010	SX_OB_20220524_20_07_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4370999)</b>									
EM2209652-014	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		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		
EM2209652-021	SX_OB_20220524_20_07_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372855)</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_ALS	EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372855) - continued</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_ALS	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		
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4370997)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_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
EM2209652-010	SX_OB_20220524_20_07_ 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



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 (%)
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4370999)</b>									
EM2209652-014	SX_IB_20220524_08_05_S S_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
EM2209652-021	SX_OB_20220524_20_07_ 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
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372855)</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_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





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 (%)
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372855) - continued</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_ALS	EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4370997)</b>									
EM2209652-001	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209652-010	SX_OB_20220524_20_07_ 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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4370999)</b>									
EM2209652-014	SX_IB_20220524_08_05_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209652-021	SX_OB_20220524_20_07_ 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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372855)</b>									
EM2209652-004	SX_OB_20220524_08_26_ SR_Rinsate_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



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 (%)
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372855) - continued</b>									
EM2209652-004	SX_OB_20220524_08_26_SR_Rinsate_ALS	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
<b>EP231P: PFAS Sums (QC Lot: 4370997)</b>									
EM2209652-001	SX_IB_20220524_08_05_S_S_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
EM2209652-010	SX_OB_20220524_20_07_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
<b>EP231P: PFAS Sums (QC Lot: 4370999)</b>									
EM2209652-014	SX_IB_20220524_08_05_S_S_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
EM2209652-021	SX_OB_20220524_20_07_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
<b>EP231P: PFAS Sums (QC Lot: 4372855)</b>									
EM2209652-004	SX_OB_20220524_08_26_SR_Rinsate_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 (%)		Acceptable Limits (%)	
						LCS	Low	High	
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4364841)</b>									
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	121	70.0	130	
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	108	50.0	130	
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	104	70.0	130	
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	95.2	70.0	130	
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	85.0	70.0	130	
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	75.6	70.0	130	
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	101	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	80.1	70.0	130	
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	70.0	70.0	130	
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	120	70.0	130	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4364905)</b>									
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.1	----	----	----	----	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4364906)</b>									
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.0	----	----	----	----	
<b>EA001: pH in soil using 0.01M CaCl extract (QCLot: 4368086)</b>									
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	100	98.8	101	
				----	7 pH Unit	100	99.3	101	
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 4364842)</b>									
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	88.3	70.0	130	
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4366398)</b>									
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	82.2	70.0	130	
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4368414)</b>									
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	103	70.0	130	
<b>EK040T: Fluoride Total (QCLot: 4366402)</b>									
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	83.4	75.2	110	
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4364701)</b>									
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	88.5	67.4	136	
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4361803)</b>									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	94.4	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	94.1	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	88.9	66.6	115	



Sub-Matrix: SOIL

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	
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4361803) - continued</b>									
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	88.3	65.2	112	
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	87.2	69.4	111	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	87.8	68.4	110	
<b>EP074H: Naphthalene (QCLot: 4361803)</b>									
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	82.2	72.3	114	
<b>EP074I: Volatile Halogenated Compounds (QCLot: 4361803)</b>									
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	104	47.0	138	
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	105	57.6	125	
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	97.0	72.3	115	
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	98.9	60.5	122	
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	92.4	70.3	112	
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	91.0	66.6	115	
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	90.3	64.4	122	
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	87.2	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	90.0	64.7	115	
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	95.8	72.6	116	
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	89.6	60.0	119	
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	88.3	71.8	116	
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	89.8	66.1	116	
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	79.4	39.8	128	
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	70.3	113	
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	85.0	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	88.3	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	86.7	48.4	120	
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4364700)</b>									
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	103	74.5	126	
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	108	72.7	126	
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	108	73.5	132	
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	110	72.8	128	
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	108	73.3	134	
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	106	72.4	128	
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	105	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	104	71.9	128	
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	107	54.4	135	
<b>EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4364700)</b>									



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	
<b>EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4364700) - continued</b>									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	107	71.5	130	
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	104	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	106	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	103	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	109	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	75.5	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	112	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	93.3	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	101	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	86.7	34.5	137	
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4364700)</b>									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	105	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	106	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	106	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	106	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	107	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	107	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	108	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	108	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	111	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	111	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	111	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	111	65.1	130	
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	116	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	117	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	118	71.3	134	
<b>EP075I: Organochlorine Pesticides (QCLot: 4364700)</b>									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	106	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	108	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	109	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	106	70.8	130	
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	108	76.5	134	
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	107	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	106	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	107	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	106	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	107	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	109	69.4	134	



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	
<b>EP075I: Organochlorine Pesticides (QCLot: 4364700) - continued</b>									
EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	110	71.0	132	
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	110	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	108	69.0	143	
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	113	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	112	71.4	135	
EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	110	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	112	70.2	135	
EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	109	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	113	63.6	135	
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4361803)</b>									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	82.0	61.1	119	
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4364702)</b>									
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	106	74.4	129	
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	104	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	94.5	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	101	70.0	130	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4361803)</b>									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	80.7	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4364702)</b>									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	109	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	103	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	109	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	105	70.0	130	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4369982)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	106	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	77.0	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	116	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	114	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	106	59.0	134	
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4369982)</b>									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	100	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.8	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	120	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.9	69.0	133	



Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	High
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4369982) - continued</b>									
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.0	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.3	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.4	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	125	69.0	133	
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4369982)</b>									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	128	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	112	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.3	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.3	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	61.0	139	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4369982)</b>									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	108	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	108	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	114	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	91.6	70.0	130	
<b>EP231P: PFAS Sums (QCLot: 4369982)</b>									
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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370997)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	108	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	104	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	99.2	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	99.1	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	99.9	53.0	142	



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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370999)</b>								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	102	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.7	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	102	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	98.1	53.0	142
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372855)</b>								
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.444 µg/L	102	72.0	130
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.47 µg/L	98.4	71.0	127
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.457 µg/L	98.4	68.0	131
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.477 µg/L	104	69.0	134
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.465 µg/L	93.9	65.0	140
EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.482 µg/L	94.2	53.0	142
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370997)</b>								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	120	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	119	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	111	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	112	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	103	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	94.4	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	113	71.0	132
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370999)</b>								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	111	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	109	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	98.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	102	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	110	71.0	132
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372855)</b>								





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
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372855) - continued</b>								
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	99.7	73.0	129
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	101	72.0	129
EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.5 µg/L	104	72.0	129
EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.5 µg/L	105	72.0	130
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	102	71.0	133
EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.5 µg/L	102	69.0	130
EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.5 µg/L	99.1	71.0	129
EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.5 µg/L	100	69.0	133
EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.5 µg/L	103	72.0	134
EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	99.2	65.0	144
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	102	71.0	132
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370997)</b>								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	105	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	109	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	108	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	114	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	104	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	110	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370999)</b>								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	112	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	108	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	98.6	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	100	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	98.7	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372855)</b>								
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	109	67.0	137
EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	1.25 µg/L	113	68.0	141



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
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372855) - continued</b>								
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	97.8	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	105	70.0	130
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	113	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	109	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	103	61.0	135
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370997)</b>								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	109	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	98.7	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	86.4	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370999)</b>								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	110	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	113	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	107	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	90.8	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372855)</b>								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.469 µg/L	104	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	115	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	107	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	95.2	70.0	130
<b>EP231P: PFAS Sums (QCLot: 4370997)</b>								
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	----	----	----	----
<b>EP231P: PFAS Sums (QCLot: 4370999)</b>								
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	----	----	----	----
<b>EP231P: PFAS Sums (QCLot: 4372855)</b>								
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	----	----	----	----



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
<b>EP231P: PFAS Sums (QCLot: 4372855) - continued</b>								
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(%)	Acceptable Limits (%)	
					MS	Low	High
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4364841)</b>							
EM2209562-006	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	83.6	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.0	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	90.5	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	87.8	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	89.9	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	90.7	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	82.3	80.0	120
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 4364842)</b>							
EM2209562-006	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	116	76.0	116
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4366398)</b>							
EM2209562-006	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 47.7	58.0	114
EM2209562-006	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 43.8	58.0	114
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4368414)</b>							
EM2209562-006	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	120	70.0	130
<b>EK040T: Fluoride Total (QCLot: 4366402)</b>							
EM2209562-006	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	97.8	70.0	130
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4364701)</b>							
EM2209562-008	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	96.7	59.6	152
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4361803)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	70.3	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	73.0	55.1	124
<b>EP074I: Volatile Halogenated Compounds (QCLot: 4361803)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	77.2	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	62.8	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	61.9	55.5	122
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4364700)</b>							



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
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4364700) - continued</b>							
EM2209562-006	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	89.6	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	88.1	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	70.7	10.0	144
<b>EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4364700)</b>							
EM2209562-006	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	90.3	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	82.2	34.2	129
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4364700)</b>							
EM2209562-006	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	88.7	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	85.1	37.8	152
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4361803)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	55.4	42.3	111
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4364702)</b>							
EM2209652-001	SX_IB_20220524_08_05_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	108	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	105	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	95.3	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	102	70.0	130
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4361803)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	54.8	39.9	109
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4364702)</b>							
EM2209652-001	SX_IB_20220524_08_05_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	110	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	104	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	112	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	106	70.0	130
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4369982)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	117	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	107	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	108	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	123	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	104	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	119	59.0	134
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4369982)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	108	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.6	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	111	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	114	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	108	69.0	133



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
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4369982) - continued</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	112	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	107	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	101	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	106	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	96.0	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	131	69.0	133
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4369982)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	108	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	118	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	109	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	111	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	115	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	102	61.0	139
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4369982)</b>							
EM2209652-002	SX_IB_20220524_08_05_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	116	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	115	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	122	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	81.9	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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370997)</b>							
EM2209652-011	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	112	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	93.5	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	102	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	106	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	113	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	130	53.0	142
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370999)</b>							
EM2209652-022	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	116	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	92.7	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	104	68.0	131



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370999) - continued</b>							
EM2209652-022	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	99.0	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	117	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	125	53.0	142
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372855)</b>							
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.444 µg/L	101	72.0	130
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.47 µg/L	122	71.0	127
		EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.457 µg/L	110	68.0	131
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.477 µg/L	127	69.0	134
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.465 µg/L	93.6	65.0	140
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.482 µg/L	96.2	53.0	142
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370997)</b>							
EM2209652-011	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	103	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	115	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	117	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	113	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	116	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	103	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	103	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	92.5	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	100	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	102	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	114	71.0	132
		<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370999)</b>					
EM2209652-022	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	115	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	116	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	121	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	117	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	112	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	113	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	103	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	106	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	94.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	112	71.0	132
		<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372855)</b>					
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 µg/L	98.2	73.0	129
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 µg/L	92.9	72.0	129
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 µg/L	97.5	72.0	129



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372855) - continued</b>							
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 µg/L	108	72.0	130
		EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 µg/L	95.9	71.0	133
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.5 µg/L	106	69.0	130
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.5 µg/L	101	71.0	129
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 µg/L	111	69.0	133
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 µg/L	101	72.0	134
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 µg/L	91.3	65.0	144
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 µg/L	102	71.0	132
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370997)</b>							
EM2209652-011	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	107	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	112	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	110	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	112	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	107	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	101	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	109	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370999)</b>							
EM2209652-022	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	110	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	133	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	124	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	104	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	116	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	103	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	101	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372855)</b>							
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 µg/L	108	67.0	137
		EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 µg/L	106	68.0	141



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372855) - continued</b>							
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 µg/L	105	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 µg/L	105	70.0	130
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 µg/L	98.1	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.5 µg/L	106	65.0	136
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.5 µg/L	93.2	61.0	135
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370997)</b>							
EM2209652-011	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	112	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	103	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	110	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	73.8	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370999)</b>							
EM2209652-022	SX_OB_20220524_23_57_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	116	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	135	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	96.8	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372855)</b>							
EM2209652-005	SX_OB_20220524_08_27_SB_Blank_ALS	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.469 µg/L	108	63.0	143
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.476 µg/L	100	64.0	140
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.48 µg/L	113	67.0	138
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.483 µg/L	104	70.0	130



## QA/QC Compliance Assessment to assist with Quality Review

Work Order	: <b>EM2209652</b>	Page	: 1 of 16
Client	: <b>AGON ENVIRONMENTAL PTY LTD</b>	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 25-May-2022
Site	: 20220525043805-ALS-56	Issue Date	: 01-Jun-2022
Sampler	: Dayle B - EP Risk, Martha - Agon	No. of samples received	: 24
Order number	: ----	No. of samples analysed	: 24

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

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

### Summary of Outliers

#### Outliers : Quality Control Samples

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

- **NO** Method Blank value outliers occur.
- **NO** Duplicate outliers occur.
- **NO** Laboratory Control outliers occur.
- Matrix Spike outliers exist - please see following pages for full details.
- 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

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



### Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
<b>Matrix Spike (MS) Recoveries</b>							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2209562--006	Anonymous	Hexavalent Chromium	18540-29-9	47.7 %	58.0-114%	Recovery less than lower data quality objective
EG048: Hexavalent Chromium (Alkaline Digest)	EM2209562--006	Anonymous	Hexavalent Chromium	18540-29-9	43.8 %	58.0-114%	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
<b>Samples Submitted</b>							
EP074S: VOC Surrogates (Ultra-Trace)	EM2209652-012	SX_IB_20220525_00_11_SS_	Toluene-D8	2037-26-5	30.6 %	55.0-117 %	Recovery less than lower data quality objective
EP074S: VOC Surrogates (Ultra-Trace)	EM2209652-012	SX_IB_20220525_00_11_SS_	4-Bromofluorobenzene	460-00-4	41.4 %	59.0-123 %	Recovery less than lower data quality objective

### Outliers : Frequency of Quality Control Samples

Matrix: **SOIL**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
<b>Laboratory Duplicates (DUP)</b>					
Hexavalent Chromium by Alkaline Digestion and DA Finish	1	20	5.00	10.00	NEPM 2013 B3 & ALS QC Standard

### Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

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



Matrix: SOIL

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
<b>Soil Glass Jar - Unpreserved (EA001)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	30-May-2022	31-May-2022	✓	30-May-2022	30-May-2022	✓	
<b>Soil Glass Jar - Unpreserved (EA001)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS, 25-May-2022	30-May-2022	01-Jun-2022	✓	30-May-2022	30-May-2022	✓	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
<b>Soil Glass Jar - Unpreserved (EA055)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	----	----	----	30-May-2022	07-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EA055)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS, 25-May-2022	----	----	----	30-May-2022	08-Jun-2022	✓	
<b>EG005(ED093): Total Metals by ICP-AES</b>								
<b>Soil Glass Jar - Unpreserved (EG005T)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	20-Nov-2022	✓	30-May-2022	20-Nov-2022	✓	
<b>Soil Glass Jar - Unpreserved (EG005T)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS, 25-May-2022	28-May-2022	21-Nov-2022	✓	30-May-2022	21-Nov-2022	✓	
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
<b>Soil Glass Jar - Unpreserved (EG035T)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	21-Jun-2022	✓	30-May-2022	21-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EG035T)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS, 25-May-2022	28-May-2022	22-Jun-2022	✓	30-May-2022	22-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	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
<b>Soil Glass Jar - Unpreserved (EG048G)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	21-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EG048G)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	22-Jun-2022	✓	31-May-2022	04-Jun-2022	✓
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
<b>Soil Glass Jar - Unpreserved (EK026SF)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	30-May-2022	07-Jun-2022	✓	31-May-2022	13-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EK026SF)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	30-May-2022	08-Jun-2022	✓	31-May-2022	13-Jun-2022	✓
<b>EK040T: Fluoride Total</b>								
<b>Soil Glass Jar - Unpreserved (EK040T)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	21-Jun-2022	✓	01-Jun-2022	21-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EK040T)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	22-Jun-2022	✓	01-Jun-2022	22-Jun-2022	✓
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	27-May-2022	20-Nov-2022	✓	----	----	----
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	27-May-2022	21-Nov-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	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	27-May-2022	20-Nov-2022	✓	----	----	----
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	27-May-2022	21-Nov-2022	✓	----	----	----
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
<b>Soil Glass Jar - Unpreserved (EP066-EM)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP066-EM)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	26-May-2022	31-May-2022	✓	27-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	26-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>EP074H: Naphthalene</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	26-May-2022	31-May-2022	✓	27-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	26-May-2022	01-Jun-2022	✓	27-May-2022	01-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	
<b>EP074I: Volatile Halogenated Compounds</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	26-May-2022	31-May-2022	✓	27-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	26-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>EP075A: Phenolic Compounds (Halogenated)</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-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	
<b>EP075I: Organochlorine Pesticides</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	26-May-2022	31-May-2022	✓	27-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	26-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	26-May-2022	31-May-2022	✓	27-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	28-May-2022	07-Jun-2022	✓	30-May-2022	07-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	26-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b>								
SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	28-May-2022	08-Jun-2022	✓	30-May-2022	07-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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	31-May-2022	20-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>HDPE Soil Jar (EP231X)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	31-May-2022	20-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>HDPE Soil Jar (EP231X)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	31-May-2022	20-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>HDPE Soil Jar (EP231X)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	31-May-2022	20-Nov-2022	✓	31-May-2022	10-Jul-2022	✓	
<b>HDPE Soil Jar (EP231X)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	10-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	
<b>EP231P: PFAS Sums</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS	24-May-2022	31-May-2022	20-Nov-2022	✓	31-May-2022	10-Jul-2022	✓
<b>HDPE Soil Jar (EP231X)</b> SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220525_00_11_SS_Primary_ALS,	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	10-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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
<b>HDPE (no PTFE) (EP231X-INJ)</b> SX_OB_20220524_08_26_SR_Rinsate_ALS,	SX_OB_20220524_08_27_SB_Blank_ALS	24-May-2022	01-Jun-2022	20-Nov-2022	✓	01-Jun-2022	20-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	27-May-2022	31-May-2022	23-Nov-2022	✓	31-May-2022	23-Nov-2022	✓
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
<b>HDPE (no PTFE) (EP231X-INJ)</b> SX_OB_20220524_08_26_SR_Rinsate_ALS,	SX_OB_20220524_08_27_SB_Blank_ALS	24-May-2022	01-Jun-2022	20-Nov-2022	✓	01-Jun-2022	20-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b> SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_OB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	27-May-2022	31-May-2022	23-Nov-2022	✓	31-May-2022	23-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	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
<b>HDPE (no PTFE) (EP231X-INJ)</b>								
SX_OB_20220524_08_26_SR_Rinsate_ALS,	SX_OB_20220524_08_27_SB_Blank_ALS	24-May-2022	01-Jun-2022	20-Nov-2022	✓	01-Jun-2022	20-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	27-May-2022	31-May-2022	23-Nov-2022	✓	31-May-2022	23-Nov-2022	✓
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
<b>HDPE (no PTFE) (EP231X-INJ)</b>								
SX_OB_20220524_08_26_SR_Rinsate_ALS,	SX_OB_20220524_08_27_SB_Blank_ALS	24-May-2022	01-Jun-2022	20-Nov-2022	✓	01-Jun-2022	20-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	27-May-2022	31-May-2022	23-Nov-2022	✓	31-May-2022	23-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	
<b>EP231P: PFAS Sums</b>								
<b>HDPE (no PTFE) (EP231X-INJ)</b>								
SX_OB_20220524_08_26_SR_Rinsate_ALS,	SX_OB_20220524_08_27_SB_Blank_ALS	<b>24-May-2022</b>	<b>01-Jun-2022</b>	20-Nov-2022	✓	<b>01-Jun-2022</b>	20-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b>								
SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS,	SX_IB_20220524_08_05_SS_Duplicate_ALS, SX_OB_20220524_12_07_SS_Primary_ALS, SX_OB_20220524_16_12_SS_Primary_ALS, SX_OB_20220524_20_07_SS_Primary_ALS, SX_IB_20220525_00_11_SS_Primary_ALS, SX_IB_20220524_08_05_SS_Primary_ALS, SX_OB_20220524_08_18_SS_Primary_ALS, SX_OB_20220524_16_09_SS_Triplicate_ALS, SX_OB_20220524_20_00_SS_Triplicate_ALS, SX_OB_20220524_23_57_SS_Primary_ALS, SX_OB_20220525_04_18_SS_Primary_ALS	<b>27-May-2022</b>	<b>31-May-2022</b>	23-Nov-2022	✓	<b>31-May-2022</b>	23-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	
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	20	5.00	10.00	✖	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	18	11.11	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	18	11.11	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	20	15.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	18	11.11	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	11	18.18	10.00	✔	NEPM 2013 B3 & ALS QC Standard
<b>Laboratory Control Samples (LCS)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	5.00	✔	NEPM 2013 B3 & ALS QC Standard
<b>Method Blanks (MB)</b>							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	2	23	8.70	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	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	
<b>Analytical Methods</b>							
<b>Matrix Spikes (MS)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	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	
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	23	17.39	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	3	33.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Laboratory Control Samples (LCS)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	23	8.70	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Method Blanks (MB)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	23	8.70	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Matrix Spikes (MS)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	23	8.70	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard



## Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> ) (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 <sub>2</sub> which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).



Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> SO <sub>4</sub> 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.



**CHAIN OF CUSTODY DOCUMENTATION**



Australian Laboratory Services Pty Ltd

CLIENT: Agon Environmental  
 ADDRESS / OFFICE: Melbourne  
 PROJECT MANAGER (PM): Craig Trimbur  
 PROJECT ID: JC0927  
 SITE: 20220526044149-ALS-52  
 RESULTS REQUIRED (Date): 5 days

SAMPLER: TB - Agon  
 Martha - Agon  
 MOBILE 1: +61 400 826 907 (Craig Trimbur)  
 MOBILE 2: +61 490 411 004 (David Lawson)  
 EMAIL REPORT TO: Labreports.TST@agonenviro.com.au  
 EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au

agonenvironmental@esdat.com.au  
 motherhublabresults1@wqip.com.au

COOLER SEAL (if applicable)  
 SAMPLE TEMPERATURE  
 CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes:

SAMPLE INFORMATION (note: S = Soil, W=Water) CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Soil Sample Prep	P10 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite								
12	1	SX_IB_20220525_08_02_SS_Primary_ALS	S	25/05/2022	08:02	Bucket	1	X	X	X	X								
13	2	SX_OB_20220525_08_09_SS_Primary_ALS	S	25/05/2022	08:09	Bucket	1	X	X	X	X								
14	3	SX_OB_20220525_08_10_SS_Duplicate_ALS	S	25/05/2022	08:10	Bucket	1	X	X	X	X								
23	-	SX_OB_20220525_08_22_SB_Blank_ALS	W	25/05/2022	08:22	Bottle	1			X									
24	-	SX_OB_20220525_08_33_SB_Rinsate_ALS	W	25/05/2022	08:33	Bottle	1			X									
15	4	SX_OB_20220525_12_14_SS_Primary_ALS	S	25/05/2022	12:14	Bucket	1	X	X	X	X								
16	5	SX_OB_20220525_16_09_Triplicate_ALS	S	25/05/2022	16:09	Bucket	1	X	X	X	X								
17	6	SX_OB_20220525_16_15_SS_Primary_ALS	S	25/05/2022	16:15	Bucket	1	X	X	X	X								
18	7	SX_IB_20220525_20_04_SS_Triplicate_ALS	S	25/05/2022	20:04	Bucket	1	X	X	X	X								
19	8	SX_OB_20220525_20_14_SS_Primary_ALS	S	25/05/2022	20:14	Bucket	1	X	X	X	X								
20	9	SX_IB_20220526_00_03_SS_Primary_ALS	S	26/05/2022	00:03	Bucket	1	X	X	X	X								
21	10	SX_OB_20220526_00_16_SS_Primary_ALS	S	26/05/2022	00:16	Bucket	1	X	X	X	X								
22	11	SX_OB_20220526_04_07_SS_Primary_ALS	S	26/05/2022	4:07	Bucket	1	X	X	X	X								

Environmental Division  
 Melbourne  
 Work Order Reference  
**EM2209724**



Telephone: +61-3-8549 9600

Springvale

RELINQUISHED BY: Name: Martha Agon, Date: 26/5/22, Of: Agon  
 Name: Hannah Kennedy, Of: Hannah Kennedy

RECEIVED BY: Name: Marcella, Date: 26/5, Of: Marcella  
 Name: An, Of: An

METHOD OF SHIPMENT: Con' Note No:  
 Transport Co:

**Water Container Codes:** P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved CRC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved;  
 V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulphuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulphuric Preserved Plastic; F = Formaldehyde Preserved Glass;  
 Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

## CERTIFICATE OF ANALYSIS

<b>Work Order</b>	<b>: EM2209724</b>	<b>Page</b>	: 1 of 40
<b>Client</b>	<b>: AGON ENVIRONMENTAL PTY LTD</b>	<b>Laboratory</b>	: Environmental Division Melbourne
<b>Contact</b>	: Craig Trimbur	<b>Contact</b>	: Josh Alexander
<b>Address</b>	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	<b>Address</b>	: 4 Westall Rd Springvale VIC Australia 3171
<b>Telephone</b>	: ----	<b>Telephone</b>	: +61-3-8549 9600
<b>Project</b>	: JC0927	<b>Date Samples Received</b>	: 26-May-2022 10:45
<b>Order number</b>	: ----	<b>Date Analysis Commenced</b>	: 26-May-2022
<b>C-O-C number</b>	: 20220526044149-ALS-52	<b>Issue Date</b>	: 02-Jun-2022 17:11
<b>Sampler</b>	: Martha, TB		
<b>Site</b>	: 20220526044149-ALS-52		
<b>Quote number</b>	: EN/150/19 -WGTP -Bulk Sample Quote		
<b>No. of samples received</b>	: 24		
<b>No. of samples analysed</b>	: 24		



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
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



## General Comments

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

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

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

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

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

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

- EG048G: EM2209380 #5 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- EG048G: EM2209724 #2, 3, 4, 5, 6, 7, 8, 9 result for hexavalent chromium has been confirmed by re-preparation and re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.



## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

				SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	100	90.0	85.7	83.8	77.1
13C8-PFOA	----	0.02	%	102	94.9	104	99.0	96.0



## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

				SX_OB_20220525_16_15_SS_Primary_ALS	SX_IB_20220525_20_04_SS_Triplicate_ALS	SX_OB_20220525_20_14_SS_Primary_ALS	SX_IB_20220526_00_03_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	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_20220525_16 _15_SS_Primary_ALS	SX_IB_20220525_20_ 04_SS_Triplicate_ALS	SX_OB_20220525_20 _14_SS_Primary_ALS	SX_IB_20220526_00_ 03_SS_Primary_ALS	SX_OB_20220526_00 _16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	86.3	87.9	90.7	79.3	80.9
13C8-PFOA	----	0.02	%	98.8	99.6	100	103	102



## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

				SX_OB_20220526_04 _07_SS_Primary_ALS	----	----	----	----
		Sampling date / time		26-May-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209724-011	-----	-----	-----	-----
				Result	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----





## Analytical Results

Sub-Matrix: ASLP LEACHATE  
 (Matrix: WATER)

Sample ID

				SX_OB_20220526_04 _07_SS_Primary_ALS	----	----	----	----
				Sampling date / time	26-May-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EM2209724-011	-----	-----	-----	-----
				Result	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	----	----	----	----
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
<b>EP231P: PFAS Sums</b>								
Sum of PFAS	----	0.10	µg/L	<0.10	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	----	----	----	----
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	82.6	----	----	----	----
13C8-PFOA	----	0.02	%	92.8	----	----	----	----



## Analytical Results

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

Sample ID

				SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015	EM2209724-016
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015	EM2209724-016
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	110	99.2	97.6	96.6	100
13C8-PFOA	----	0.02	%	102	95.8	99.5	93.1	92.1



## Analytical Results

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

Sample ID

				SX_OB_20220525_16_15_SS_Primary_ALS	SX_IB_20220525_20_04_SS_Triplicate_ALS	SX_OB_20220525_20_14_SS_Primary_ALS	SX_IB_20220526_00_03_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-017	EM2209724-018	EM2209724-019	EM2209724-020	EM2209724-021
				Result	Result	Result	Result	Result
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	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_20220525_16 _15_SS_Primary_ALS	SX_IB_20220525_20_ 04_SS_Triplicate_ALS	SX_OB_20220525_20 _14_SS_Primary_ALS	SX_IB_20220526_00_ 03_SS_Primary_ALS	SX_OB_20220526_00 _16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-017	EM2209724-018	EM2209724-019	EM2209724-020	EM2209724-021
				Result	Result	Result	Result	Result
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.02	%	99.8	106	102	106	103
13C8-PFOA	----	0.02	%	93.2	100	96.9	98.4	96.5



## Analytical Results

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

Sample ID

SX\_OB\_20220526\_04  
 \_07\_SS\_Primary\_ALS

Compound		CAS Number	LOR	Unit	Result				
					26-May-2022 00:00	----	----	----	----
					EM2209724-022	-----	-----	-----	-----
					Result	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----	----
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	----	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----	----



## Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)		Sample ID			SX_OB_20220526_04 _07_SS_Primary_ALS	----	----	----	----
		Sampling date / time			26-May-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209724-022	-----	-----	-----	-----	-----
				Result	----	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	----	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	----	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	----	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	----	----	----	----	----
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----	----
<b>EP231P: PFAS Sums</b>									
Sum of PFAS	----	0.10	µg/L	<0.10	----	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	----	----	----	----	----
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.02	%	109	----	----	----	----	----
13C8-PFOA	----	0.02	%	104	----	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
pH (CaCl2)	----	0.1	pH Unit	8.0	7.5	7.6	7.7	7.6
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	34.7	32.0	31.8	32.3	30.5
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	31	44	46	45	60
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	98	109	105	112	109
Copper	7440-50-8	5	mg/kg	51	45	45	46	50
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	142	134	117	127	125
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	96	80	74	85	73
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	1.1	1.4	1.7	1.5
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
<b>EK040T: Fluoride Total</b>								
Fluoride	16984-48-8	100	mg/kg	130	110	130	140	140
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Initial pH	----	0.1	pH Unit	9.4	8.6	8.5	8.4	8.5
After HCl pH	----	0.1	pH Unit	1.3	1.2	1.1	1.2	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	5.2	5.1	5.1	5.1	5.1
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP074A: Monocyclic Aromatic Hydrocarbons - Continued</b>								
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
<b>EP074H: Naphthalene</b>								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
<b>EP074I: Volatile Halogenated Compounds</b>								
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
<b>EP075A: Phenolic Compounds (Halogenated)</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated) - Continued</b>								
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
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
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
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
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	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>EP075I: Organochlorine Pesticides</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP075I: Organochlorine Pesticides - Continued</b>								
^ 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
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
>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
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
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_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
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
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS	SX_OB_20220525_16_09_Triplicate_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-001	EM2209724-002	EM2209724-003	EM2209724-004	EM2209724-005
				Result	Result	Result	Result	Result
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued</b>								
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
<b>EP231P: PFAS Sums</b>								
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
<b>EP066S: PCB Surrogate</b>								
Decachlorobiphenyl	2051-24-3	0.1	%	107	82.9	79.5	85.8	86.0
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	84.5	86.6	80.1	64.3	95.8
Toluene-D8	2037-26-5	0.1	%	75.2	87.8	86.5	70.7	105
4-Bromofluorobenzene	460-00-4	0.1	%	85.8	93.2	105	74.6	114
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>								
Phenol-d6	13127-88-3	0.025	%	102	91.7	86.4	95.6	95.3
2-Chlorophenol-D4	93951-73-6	0.025	%	94.7	85.8	81.5	84.1	89.5
2,4,6-Tribromophenol	118-79-6	0.025	%	100	90.2	86.1	89.1	94.7
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>								
Nitrobenzene-D5	4165-60-0	0.025	%	104	94.8	90.1	92.9	100
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	95.2	87.5	82.3	85.1	90.9
2-Fluorobiphenyl	321-60-8	0.025	%	103	93.5	89.9	92.7	97.9
Anthracene-d10	1719-06-8	0.025	%	106	98.4	93.9	97.1	102
4-Terphenyl-d14	1718-51-0	0.025	%	95.7	87.8	82.9	86.4	91.5
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.0002	%	91.2	83.1	99.2	93.4	94.2
13C8-PFOA	----	0.0002	%	105	106	111	98.8	103



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_16 _15_SS_Primary ALS	SX_IB_20220525_20_ 04_SS_Triplicate ALS	SX_OB_20220525_20 _14_SS_Primary ALS	SX_IB_20220526_00_ 03_SS_Primary ALS	SX_OB_20220526_00 _16_SS_Primary ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010
				Result	Result	Result	Result	Result
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
pH (CaCl <sub>2</sub> )	----	0.1	pH Unit	7.7	9.1	7.6	7.7	7.7
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	32.0	33.7	29.1	29.4	29.3
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	54	31	36	14	59
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	101	104	85	136	91
Copper	7440-50-8	5	mg/kg	54	58	38	57	44
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	129	179	107	166	115
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	86	109	65	84	72
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	1.4	1.6	1.5	1.8	<1.0
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
<b>EK040T: Fluoride Total</b>								
Fluoride	16984-48-8	100	mg/kg	150	150	160	220	150
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Initial pH	----	0.1	pH Unit	8.6	9.8	8.3	9.3	8.2
After HCl pH	----	0.1	pH Unit	1.2	1.2	1.2	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	5.2	5.1	5.1	5.1
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	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_20220525_16 _15_SS_Primary ALS	SX_IB_20220525_20_ 04_SS_Triplicate ALS	SX_OB_20220525_20 _14_SS_Primary ALS	SX_IB_20220526_00_ 03_SS_Primary ALS	SX_OB_20220526_00 _16_SS_Primary ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00	
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010	
				Result	Result	Result	Result	Result	
<b>EP074A: Monocyclic Aromatic Hydrocarbons - Continued</b>									
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	
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	
<sup>^</sup> Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
<sup>^</sup> Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
<b>EP074H: Naphthalene</b>									
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1	
<b>EP074I: Volatile Halogenated Compounds</b>									
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	
1,1,1,2,2-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	
<sup>^</sup> Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	
<sup>^</sup> Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>EP075A: Phenolic Compounds (Halogenated)</b>									
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	





## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_16 _15_SS_Primary ALS	SX_IB_20220525_20_ 04_SS_Triplicate ALS	SX_OB_20220525_20 _14_SS_Primary ALS	SX_IB_20220526_00_ 03_SS_Primary ALS	SX_OB_20220526_00 _16_SS_Primary ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated) - Continued</b>								
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
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
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
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
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
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



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_16_15_SS_Primary_ALS	SX_IB_20220525_20_04_SS_Triplicate_ALS	SX_OB_20220525_20_14_SS_Primary_ALS	SX_IB_20220526_00_03_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
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	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>EP075I: Organochlorine Pesticides</b>								
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
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	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



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_16_15_SS_Primary_ALS	SX_IB_20220525_20_04_SS_Triplicate_ALS	SX_OB_20220525_20_14_SS_Primary_ALS	SX_IB_20220526_00_03_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00	
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010	
				Result	Result	Result	Result	Result	
<b>EP075I: Organochlorine Pesticides - Continued</b>									
^ Sum of other organochlorine pesticides				----	0.03	mg/kg	<0.03	<0.03	<0.03
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction				----	20	mg/kg	<20	<20	<20
C10 - C14 Fraction				----	50	mg/kg	<50	<50	<50
C6 - C10 Fraction				C6_C10	20	mg/kg	<20	<20	<20
C15 - C28 Fraction				----	100	mg/kg	<100	<100	<100
C29 - C36 Fraction				----	100	mg/kg	<100	<100	<100
^ C10 - C36 Fraction (sum)				----	50	mg/kg	<50	<50	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
>C10 - C16 Fraction				----	50	mg/kg	<50	<50	<50
>C16 - C34 Fraction				----	100	mg/kg	<100	<100	<100
>C34 - C40 Fraction				----	100	mg/kg	<100	<100	<100
^ >C10 - C40 Fraction (sum)				----	50	mg/kg	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)				----	50	mg/kg	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)				C6_C10-BTEX	20	mg/kg	<20	<20	<20
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)				375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)				2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)				355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)				375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)				1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)				335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)				375-22-4	5	µg/kg	<5	<5	<5
Perfluoropentanoic acid (PFPeA)				2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)				307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)				375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_16 _15_SS_Primary ALS	SX_IB_20220525_20_04_SS_Triplicate ALS	SX_OB_20220525_20_14_SS_Primary ALS	SX_IB_20220526_00_03_SS_Primary ALS	SX_OB_20220526_00_16_SS_Primary ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00	
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010	
				Result	Result	Result	Result	Result	
<b>EP231B: Perfluoroalkyl Carboxylic Acids - Continued</b>									
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	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
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	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
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	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220525_16 _15_SS_Primary ALS	SX_IB_20220525_20_ 04_SS_Triplicate ALS	SX_OB_20220525_20 _14_SS_Primary ALS	SX_IB_20220526_00_ 03_SS_Primary ALS	SX_OB_20220526_00 _16_SS_Primary ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00	26-May-2022 00:00	
Compound	CAS Number	LOR	Unit	EM2209724-006	EM2209724-007	EM2209724-008	EM2209724-009	EM2209724-010	
				Result	Result	Result	Result	Result	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued</b>									
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	
<b>EP231P: PFAS Sums</b>									
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	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	81.0	84.2	90.4	100	92.3	
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	92.2	88.1	90.1	79.9	66.0	
Toluene-D8	2037-26-5	0.1	%	100	93.3	93.4	76.8	57.0	
4-Bromofluorobenzene	460-00-4	0.1	%	106	107	105	85.8	69.8	
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>									
Phenol-d6	13127-88-3	0.025	%	83.4	93.6	101	115	107	
2-Chlorophenol-D4	93951-73-6	0.025	%	82.9	82.2	87.4	102	95.5	
2,4,6-Tribromophenol	118-79-6	0.025	%	86.2	85.4	91.7	115	110	
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>									
Nitrobenzene-D5	4165-60-0	0.025	%	88.3	88.4	97.5	112	102	
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	80.2	83.1	88.3	99.5	93.6	
2-Fluorobiphenyl	321-60-8	0.025	%	89.1	90.6	95.8	107	100	
Anthracene-d10	1719-06-8	0.025	%	93.8	93.8	99.6	102	96.5	
4-Terphenyl-d14	1718-51-0	0.025	%	82.9	83.6	88.6	115	111	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.0002	%	73.8	94.6	82.6	89.2	88.2	
13C8-PFOA	----	0.0002	%	102	101	103	104	106	



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
pH (CaCl <sub>2</sub> )	----	0.1	pH Unit	7.8	----	----	----	----
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	28.4	----	----	----	----
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	33	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	5	mg/kg	71	----	----	----	----
Copper	7440-50-8	5	mg/kg	38	----	----	----	----
Lead	7439-92-1	5	mg/kg	<5	----	----	----	----
Molybdenum	7439-98-7	5	mg/kg	<5	----	----	----	----
Nickel	7440-02-0	5	mg/kg	97	----	----	----	----
Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
Silver	7440-22-4	2	mg/kg	<2	----	----	----	----
Tin	7440-31-5	10	mg/kg	<10	----	----	----	----
Zinc	7440-66-6	5	mg/kg	58	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
Total Cyanide	57-12-5	5	mg/kg	<5	----	----	----	----
<b>EK040T: Fluoride Total</b>								
Fluoride	16984-48-8	100	mg/kg	150	----	----	----	----
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Initial pH	----	0.1	pH Unit	8.8	----	----	----	----
After HCl pH	----	0.1	pH Unit	1.2	----	----	----	----
Extraction Fluid pH	----	0.1	pH Unit	5.0	----	----	----	----
Final pH	----	0.1	pH Unit	5.1	----	----	----	----
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
Final pH	----	0.1	pH Unit	----	10.4	8.9	9.0	9.2
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----
<b>EP074H: Naphthalene</b>								
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	----	----	----	----
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	----	----	----	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	----	----	----	----
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	----	----	----	----
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	----	----	----	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	----	----	----	----
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	----	----	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	----	----	----	----
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	----	----	----	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	----	----	----	----
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	----	----	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	----	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	----	----	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	----	----	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	----	----	----	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	----	----	----	----
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	----	----	----	----
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	----	----	----	----
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	----	----	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	----	----	----	----
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP075A: Phenolic Compounds (Halogenated)</b>								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	----	----	----	----
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	----	----	----	----
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	----	----	----	----
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	----	----	----	----
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	----	----	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	----	----	----	----
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	----	----	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	----	----	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
Phenol	108-95-2	1	mg/kg	<1	----	----	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	----	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	----	----	----	----
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	----	----	----	----
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	----	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	----	----	----	----
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	----	----	----	----
Dinoseb	88-85-7	20	mg/kg	<20	----	----	----	----
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	----	----	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----





## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	<b>0.6</b>	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	----	----	----	----
<b>EP075I: Organochlorine Pesticides</b>								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	----	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	----	----	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP075I: Organochlorine Pesticides - Continued</b>								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	----	----	----	----
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	----	----	----	----
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
C6 - C9 Fraction	----	20	mg/kg	<20	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	----	----	----	----
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	----	----	----	----
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	----	----	----	----
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								



## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220526_04_07_SS_Primary_ALS	SX_IB_20220525_08_02_SS_Primary_ALS	SX_OB_20220525_08_09_SS_Primary_ALS	SX_OB_20220525_08_10_SS_Duplicate_ALS	SX_OB_20220525_12_14_SS_Primary_ALS
Sampling date / time				26-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-011	EM2209724-012	EM2209724-013	EM2209724-014	EM2209724-015
				Result	Result	Result	Result	Result
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued</b>								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	----	----	----	----
<b>EP231P: PFAS Sums</b>								
Sum of PFAS	----	50.0	µg/kg	<50.0	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	----	----	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	----	----	----	----
<b>EP066S: PCB Surrogate</b>								
Decachlorobiphenyl	2051-24-3	0.1	%	87.5	----	----	----	----
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	68.0	----	----	----	----
Toluene-D8	2037-26-5	0.1	%	55.6	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	76.7	----	----	----	----
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>								
Phenol-d6	13127-88-3	0.025	%	97.6	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	86.3	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.025	%	95.2	----	----	----	----
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>								
Nitrobenzene-D5	4165-60-0	0.025	%	91.5	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	85.0	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	92.0	----	----	----	----
Anthracene-d10	1719-06-8	0.025	%	88.5	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	101	----	----	----	----
<b>EP231S: PFAS Surrogate</b>								
13C4-PFOS	----	0.0002	%	89.6	----	----	----	----
13C8-PFOA	----	0.0002	%	100	----	----	----	----



**Analytical Results**

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_16_09_Triplicate_ALS	SX_OB_20220525_16_15_SS_Primary_ALS	SX_IB_20220525_20_04_SS_Triplicate_ALS	SX_OB_20220525_20_14_SS_Primary_ALS	SX_IB_20220526_00_03_SS_Primary_ALS
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	25-May-2022 00:00	26-May-2022 00:00
Compound	CAS Number	LOR	Unit	EM2209724-016	EM2209724-017	EM2209724-018	EM2209724-019	EM2209724-020
				Result	Result	Result	Result	Result
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
<b>Final pH</b>	----	0.1	pH Unit	<b>9.1</b>	<b>9.2</b>	<b>10.0</b>	<b>9.4</b>	<b>9.5</b>



**Analytical Results**

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220526_00 _16_SS_Primary_ALS	SX_OB_20220526_04 _07_SS_Primary_ALS	----	----	----
Sampling date / time				26-May-2022 00:00	26-May-2022 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209724-021	EM2209724-022	-----	-----	-----	
				Result	Result	---	---	---	
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>									
Final pH	----	0.1	pH Unit	9.2	9.5	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		SX_OB_20220525_08 _22_SB_Blank_ALS	SX_OB_20220525_08 _33_SB_Rinsate_ALS	----	----	----
Sampling date / time			25-May-2022 00:00		25-May-2022 00:00		----	----	----
Compound	CAS Number	LOR	Unit	EM2209724-023	EM2209724-024	-----	-----	-----	
				Result	Result	---	---	---	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220525_08 _22_SB_Blank_ALS	SX_OB_20220525_08 _33_SB_Rinsate_ALS	----	----	----
Sampling date / time				25-May-2022 00:00	25-May-2022 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209724-023	EM2209724-024	-----	-----	-----	
				Result	Result	---	---	---	
<b>EP231C: Perfluoroalkyl Sulfonamides - Continued</b>									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	----	----	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
<b>EP231P: PFAS Sums</b>									
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.02	%	98.8	101	----	----	----	
13C8-PFOA	----	0.02	%	102	95.6	----	----	----	





## Surrogate Control Limits

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

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

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP066S: PCB Surrogate</b>			
Decachlorobiphenyl	2051-24-3	41	122
<b>EP074S: VOC Surrogates (Ultra-Trace)</b>			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
<b>EP075S: Acid Extractable Surrogates (Waste Classification)</b>			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
<b>EP075T: Base/Neutral Extractable Surrogates (Waste Classification)</b>			
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
<b>EP231S: PFAS Surrogate</b>			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

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

## Automated Guideline Comparison Report

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

<b>Work Order</b>	: <b>EM2209724</b>	Page	: 1 of 33
Client	: <b>AGON ENVIRONMENTAL PTY LTD</b>	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: Craig.Trimbur@eprisk.com.au	E-mail	: Josh.Alexander@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 26-May-2022 10:45
Order number	: ----	Date Analysed	: 26-May-2022
C-O-C number	: 20220526044149-ALS-52	Date Issued	: 02-Jun-2022 17:49
No. of samples received	: 24		
No. of samples analysed	: 24	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

#### General Comments

This guideline comparison report **only** provides comparison of total concentration data against upper limit thresholds for the 'Fill Material', 'C', 'B' Categories in Table 2 of EPA Publication IWRG621.

This guideline comparison report is **NOT** a soil classification report. Classification of soils as Fill Material, Category C, Category B or Category A requires consideration of a number of other factors including preliminary site investigation, sampling density and statistical calculations, as set out in EPA Publication IWRG 702 and measurement uncertainty.

This guideline comparison report only provides comparison data for parameters, specifically listed within the IWRG621 (2009) guideline, that are analysed by ALS.

Only results in the 'Analytical Results' section have been compared to the guideline.

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



## Summary of Thresholds Reached or Exceeded

EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_IB_20220525_08_02_S S_Primary_ALS	EM2209724-001	Arsenic	EG005T	5	< 20 mg/kg	31 mg/kg
SX_IB_20220525_08_02_S S_Primary_ALS	EM2209724-001	Nickel	EG005T	5	< 60 mg/kg	142 mg/kg
SX_OB_20220525_08_09_ SS_Primary_ALS	EM2209724-002	Arsenic	EG005T	5	< 20 mg/kg	44 mg/kg
SX_OB_20220525_08_09_ SS_Primary_ALS	EM2209724-002	Nickel	EG005T	5	< 60 mg/kg	134 mg/kg
SX_OB_20220525_08_09_ SS_Primary_ALS	EM2209724-002	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.1 mg/kg
SX_OB_20220525_08_10_ SS_Duplicate_ALS	EM2209724-003	Arsenic	EG005T	5	< 20 mg/kg	46 mg/kg
SX_OB_20220525_08_10_ SS_Duplicate_ALS	EM2209724-003	Nickel	EG005T	5	< 60 mg/kg	117 mg/kg
SX_OB_20220525_08_10_ SS_Duplicate_ALS	EM2209724-003	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.4 mg/kg
SX_OB_20220525_12_14_ SS_Primary_ALS	EM2209724-004	Arsenic	EG005T	5	< 20 mg/kg	45 mg/kg
SX_OB_20220525_12_14_ SS_Primary_ALS	EM2209724-004	Nickel	EG005T	5	< 60 mg/kg	127 mg/kg
SX_OB_20220525_12_14_ SS_Primary_ALS	EM2209724-004	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.7 mg/kg
SX_OB_20220525_16_09_ Triplicate_ALS	EM2209724-005	Arsenic	EG005T	5	< 20 mg/kg	60 mg/kg
SX_OB_20220525_16_09_ Triplicate_ALS	EM2209724-005	Nickel	EG005T	5	< 60 mg/kg	125 mg/kg
SX_OB_20220525_16_09_ Triplicate_ALS	EM2209724-005	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.5 mg/kg
SX_OB_20220525_16_15_ SS_Primary ALS	EM2209724-006	Arsenic	EG005T	5	< 20 mg/kg	54 mg/kg
SX_OB_20220525_16_15_ SS_Primary ALS	EM2209724-006	Nickel	EG005T	5	< 60 mg/kg	129 mg/kg
SX_OB_20220525_16_15_ SS_Primary ALS	EM2209724-006	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.4 mg/kg
SX_IB_20220525_20_04_S S_Triplicate_ALS	EM2209724-007	pH (CaCl2)	EA001	0.1	> 4 pH Unit< 9 pH Unit	9.1 pH Unit
SX_IB_20220525_20_04_S S_Triplicate_ALS	EM2209724-007	Arsenic	EG005T	5	< 20 mg/kg	31 mg/kg



**EPA Victoria Publication IWRG 621 (2009)**

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

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_IB_20220525_20_04_S S_Triplicate_ALS	EM2209724-007	Nickel	EG005T	5	< 60 mg/kg	179 mg/kg
SX_IB_20220525_20_04_S S_Triplicate_ALS	EM2209724-007	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.6 mg/kg
SX_OB_20220525_20_14_ SS_Primary_ALS	EM2209724-008	Arsenic	EG005T	5	< 20 mg/kg	36 mg/kg
SX_OB_20220525_20_14_ SS_Primary_ALS	EM2209724-008	Nickel	EG005T	5	< 60 mg/kg	107 mg/kg
SX_OB_20220525_20_14_ SS_Primary_ALS	EM2209724-008	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.5 mg/kg
SX_IB_20220526_00_03_S S_Primary_ALS	EM2209724-009	Nickel	EG005T	5	< 60 mg/kg	166 mg/kg
SX_IB_20220526_00_03_S S_Primary_ALS	EM2209724-009	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.8 mg/kg
SX_OB_20220526_00_16_ SS_Primary_ALS	EM2209724-010	Arsenic	EG005T	5	< 20 mg/kg	59 mg/kg
SX_OB_20220526_00_16_ SS_Primary_ALS	EM2209724-010	Nickel	EG005T	5	< 60 mg/kg	115 mg/kg
SX_OB_20220526_04_07_ SS_Primary_ALS	EM2209724-011	Arsenic	EG005T	5	< 20 mg/kg	33 mg/kg
SX_OB_20220526_04_07_ SS_Primary_ALS	EM2209724-011	Nickel	EG005T	5	< 60 mg/kg	97 mg/kg

**EPA Victoria Publication IWRG 621 (2009)**

**Table 2: Soil Hazard Categorisation Thresholds : Category C**

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_IB_20220525_20_04_S S_Triplicate_ALS	EM2209724-007	pH (CaCl2)	EA001	0.1	> 4 pH Unit < 9 pH Unit	9.1 pH Unit





**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S	525_16_09_Tr
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	uplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-001 MU	EM2209724-002 MU	EM2209724-003 MU	EM2209724-004 MU	EM2209724-005 MU
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S	525_16_09_Tr
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	uplicate_ALS
				Guideline	Guideline	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-001 MU	EM2209724-002 MU	EM2209724-003 MU	EM2209724-004 MU	EM2209724-005 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.0 ±0.1	7.5 ±0.1	7.6 ±0.1	7.7 ±0.1	7.6 ±0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	500	31 ±4	44 ±6	46 ±6	45 ±6	60 ±8
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	51 ±6	45 ±5	45 ±6	46 ±6	50 ±6
Lead	EG005T	5	mg/kg	----	1500	<5 ..	<5 ..	<5 ..	<5 ..	6 ±1.0
Molybdenum	EG005T	5	mg/kg	----	1000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	3000	142 ±14	134 ±13	117 ±12	127 ±12	125 ±12
Selenium	EG005T	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	180	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	500	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	35000	96 ±11	80 ±9	74 ±8	85 ±10	73 ±8
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 ..	1.1 ±0.2	1.4 ±0.2	1.7 ±0.3	1.5 ±0.3
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	10000	130 ±30	110 ±30	130 ±30	140 ±30	140 ±30
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S	525_16_09_Tr
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	uplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-001 MU	EM2209724-002 MU	EM2209724-003 MU	EM2209724-004 MU	EM2209724-005 MU
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..





**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S	525_16_09_Tr
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	uplicate_ALS
				Guideline	Guideline	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-001 MU	EM2209724-002 MU	EM2209724-003 MU	EM2209724-004 MU	EM2209724-005 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.0 ±0.1	7.5 ±0.1	7.6 ±0.1	7.7 ±0.1	7.6 ±0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	20	31 ±4	44 ±6	46 ±6	45 ±6	60 ±8
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	51 ±6	45 ±5	45 ±6	46 ±6	50 ±6
Lead	EG005T	5	mg/kg	----	300	<5 ..	<5 ..	<5 ..	<5 ..	6 ±1.0
Molybdenum	EG005T	5	mg/kg	----	40	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	60	142 ±14	134 ±13	117 ±12	127 ±12	125 ±12
Selenium	EG005T	5	mg/kg	----	10	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	10	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	50	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	200	96 ±11	80 ±9	74 ±8	85 ±10	73 ±8
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 ..	1.1 ±0.2	1.4 ±0.2	1.7 ±0.3	1.5 ±0.3
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	450	130 ±30	110 ±30	130 ±30	140 ±30	140 ±30
<b>EP066: Polychlorinated Biphenyls (PCB)</b>										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S	525_16_09_Tr
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	uplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-001 MU	EM2209724-002 MU	EM2209724-003 MU	EM2209724-004 MU	EM2209724-005 MU
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220
				Sampling date/time		525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
				Lower Limit	Upper Limit	S_Primary ALS	S_Triplicate ALS	S_Primary_AL S	S_Primary_AL S	S_Primary_AL S
						25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00
						EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.7 ± 0.1	9.1 ± 0.1	7.6 ± 0.1	7.7 ± 0.1	7.7 ± 0.1
<b>EG005(ED093)T: Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	2000	54 ± 7	31 ± 4	36 ± 5	14 ± 2	59 ± 7
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	20000	54 ± 7	58 ± 7	38 ± 5	57 ± 7	44 ± 5
Lead	EG005T	5	mg/kg	----	6000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Molybdenum	EG005T	5	mg/kg	----	4000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Nickel	EG005T	5	mg/kg	----	12000	129 ± 13	179 ± 18	107 ± 10	166 ± 16	115 ± 11
Selenium	EG005T	5	mg/kg	----	200	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	720	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Zinc	EG005T	5	mg/kg	----	140000	86 ± 10	109 ± 12	65 ± 8	84 ± 10	72 ± 8
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	1.4 ± 0.2	1.6 ± 0.3	1.5 ± 0.3	1.8 ± 0.3	<1.0 ..
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	40000	150 ± 40	150 ± 40	160 ± 40	220 ± 40	150 ± 40
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP074I: Volatile Halogenated Compounds</b>										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220
				Sampling date/time		525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
				Lower Limit	Upper Limit	S_Primary ALS	S_Triplicate ALS	S_Primary ALS	S_Primary ALS	S_Primary ALS
				25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00		
				EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU		
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
							S_Primary ALS	S_Triplicate ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00	
						EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.7 ± 0.1	9.1 ± 0.1	7.6 ± 0.1	7.7 ± 0.1	7.7 ± 0.1	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>											
Arsenic	EG005T	5	mg/kg	----	500	54 ± 7	31 ± 4	36 ± 5	14 ± 2	59 ± 7	
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..	
Copper	EG005T	5	mg/kg	----	5000	54 ± 7	58 ± 7	38 ± 5	57 ± 7	44 ± 5	
Lead	EG005T	5	mg/kg	----	1500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Molybdenum	EG005T	5	mg/kg	----	1000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Nickel	EG005T	5	mg/kg	----	3000	129 ± 13	179 ± 18	107 ± 10	166 ± 16	115 ± 11	
Selenium	EG005T	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Silver	EG005T	2	mg/kg	----	180	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..	
Tin	EG005T	10	mg/kg	----	500	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..	
Zinc	EG005T	5	mg/kg	----	35000	86 ± 10	109 ± 12	65 ± 8	84 ± 10	72 ± 8	
<b>EG035T: Total Recoverable Mercury by FIMS</b>											
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	1.4 ± 0.2	1.6 ± 0.3	1.5 ± 0.3	1.8 ± 0.3	<1.0 ..	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>											
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
<b>EK040T: Fluoride Total</b>											
Fluoride	EK040T	100	mg/kg	----	10000	150 ± 40	150 ± 40	160 ± 40	220 ± 40	150 ± 40	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>											
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
<b>EP074I: Volatile Halogenated Compounds</b>											
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
<b>EP075A: Phenolic Compounds (Halogenated)</b>											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
							S_Primary ALS	S_Triplicate ALS	S_Primary_AL S	S_Primary_AL S	S_Primary_AL S
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00	
						EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..	
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>											
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
<b>EP075I: Organochlorine Pesticides</b>											
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	
<b>EP080/071: Total Petroleum Hydrocarbons</b>											
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..	



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
							S_Primary ALS	S_Triplicate ALS	S_Primary_AL S	S_Primary_AL S	S_Primary_AL S
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00	
						EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.7 ± 0.1	9.1 ± 0.1	7.6 ± 0.1	7.7 ± 0.1	7.7 ± 0.1	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>											
Arsenic	EG005T	5	mg/kg	----	20	54 ± 7	31 ± 4	36 ± 5	14 ± 2	59 ± 7	
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..	
Copper	EG005T	5	mg/kg	----	100	54 ± 7	58 ± 7	38 ± 5	57 ± 7	44 ± 5	
Lead	EG005T	5	mg/kg	----	300	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Molybdenum	EG005T	5	mg/kg	----	40	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Nickel	EG005T	5	mg/kg	----	60	129 ± 13	179 ± 18	107 ± 10	166 ± 16	115 ± 11	
Selenium	EG005T	5	mg/kg	----	10	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Silver	EG005T	2	mg/kg	----	10	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..	
Tin	EG005T	10	mg/kg	----	50	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..	
Zinc	EG005T	5	mg/kg	----	200	86 ± 10	109 ± 12	65 ± 8	84 ± 10	72 ± 8	
<b>EG035T: Total Recoverable Mercury by FIMS</b>											
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	1.4 ± 0.2	1.6 ± 0.3	1.5 ± 0.3	1.8 ± 0.3	<1.0 ..	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>											
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
<b>EK040T: Fluoride Total</b>											
Fluoride	EK040T	100	mg/kg	----	450	150 ± 40	150 ± 40	160 ± 40	220 ± 40	150 ± 40	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>											
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>											
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
<b>EP074I: Volatile Halogenated Compounds</b>											
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
<b>EP075A: Phenolic Compounds (Halogenated)</b>											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>											



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220
				Guideline	Guideline	525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S	526_00_16_S
						S_Primary ALS	S_Triplicate ALS	S_Primary_AL S	S_Primary_AL S	S_Primary_AL S
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00	26-May-2022 15:00
						EM2209724-006 MU	EM2209724-007 MU	EM2209724-008 MU	EM2209724-009 MU	EM2209724-010 MU
<b>EP075A: Phenolic Compounds (Non-halogenated) - Continued</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..





**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
							S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>											
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.8 ± 0.1	----	----	----	----	
<b>EG005(ED093T): Total Metals by ICP-AES</b>											
Arsenic	EG005T	5	mg/kg	----	2000	33 ± 5	----	----	----	----	
Cadmium	EG005T	1	mg/kg	----	400	<1 --	----	----	----	----	
Copper	EG005T	5	mg/kg	----	20000	38 ± 5	----	----	----	----	
Lead	EG005T	5	mg/kg	----	6000	<5 --	----	----	----	----	
Molybdenum	EG005T	5	mg/kg	----	4000	<5 --	----	----	----	----	
Nickel	EG005T	5	mg/kg	----	12000	97 ± 10	----	----	----	----	
Selenium	EG005T	5	mg/kg	----	200	<5 --	----	----	----	----	
Silver	EG005T	2	mg/kg	----	720	<2 --	----	----	----	----	
Zinc	EG005T	5	mg/kg	----	140000	58 ± 7	----	----	----	----	
<b>EG035T: Total Recoverable Mercury by FIMS</b>											
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 --	----	----	----	----	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 --	----	----	----	----	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>											
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 --	----	----	----	----	
<b>EK040T: Fluoride Total</b>											
Fluoride	EK040T	100	mg/kg	----	40000	150 ± 40	----	----	----	----	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>											
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 --	----	----	----	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 --	----	----	----	----	
<b>EP074I: Volatile Halogenated Compounds</b>											
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 --	----	----	----	----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 --	----	----	----	----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Halogenated)</b>											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 --	----	----	----	----	
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>											



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
							S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU	
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>											
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5	--	----	----	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5	--	----	----	----	
<b>EP075I: Organochlorine Pesticides</b>											
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05	--	----	----	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30	--	----	----	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	----	----	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10	--	----	----	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03	--	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>											
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20	--	----	----	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50	--	----	----	----	



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
							S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU	
<b>EA001: pH in soil using 0.01M CaCl extract</b>											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ± 0.1	----	----	----	----	
<b>EG005(ED093T): Total Metals by ICP-AES</b>											
Arsenic	EG005T	5	mg/kg	----	500	33 ± 5	----	----	----	----	
Cadmium	EG005T	1	mg/kg	----	100	<1 --	----	----	----	----	
Copper	EG005T	5	mg/kg	----	5000	38 ± 5	----	----	----	----	
Lead	EG005T	5	mg/kg	----	1500	<5 --	----	----	----	----	
Molybdenum	EG005T	5	mg/kg	----	1000	<5 --	----	----	----	----	
Nickel	EG005T	5	mg/kg	----	3000	97 ± 10	----	----	----	----	
Selenium	EG005T	5	mg/kg	----	50	<5 --	----	----	----	----	
Silver	EG005T	2	mg/kg	----	180	<2 --	----	----	----	----	
Tin	EG005T	10	mg/kg	----	500	<10 --	----	----	----	----	
Zinc	EG005T	5	mg/kg	----	35000	58 ± 7	----	----	----	----	
<b>EG035T: Total Recoverable Mercury by FIMS</b>											
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 --	----	----	----	----	
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 --	----	----	----	----	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>											
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 --	----	----	----	----	
<b>EK040T: Fluoride Total</b>											
Fluoride	EK040T	100	mg/kg	----	10000	150 ± 40	----	----	----	----	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>											
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 --	----	----	----	----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 --	----	----	----	----	
<b>EP074I: Volatile Halogenated Compounds</b>											
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 --	----	----	----	----	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 --	----	----	----	----	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Halogenated)</b>											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 --	----	----	----	----	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 --	----	----	----	----	



**Soil Hazard Categorisation and Management**

**Table 2: Soil Hazard Categorisation Thresholds : Category C: Table 2: Soil Hazard Categorisation Thresholds : Category C**

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	
				Sampling date/time	Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
							S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU	
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>											
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	--	----	----	----	
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	--	----	----	----	
<b>EP075I: Organochlorine Pesticides</b>											
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	--	----	----	----	
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	--	----	----	----	
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	--	----	----	----	
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	--	----	----	----	
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	--	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>											
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	--	----	----	----	
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	--	----	----	----	



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
						S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ± 0.1	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	20	33 ± 5	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	3	<1 --	----	----	----	----
Copper	EG005T	5	mg/kg	----	100	38 ± 5	----	----	----	----
Lead	EG005T	5	mg/kg	----	300	<5 --	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	40	<5 --	----	----	----	----
Nickel	EG005T	5	mg/kg	----	60	97 ± 10	----	----	----	----
Selenium	EG005T	5	mg/kg	----	10	<5 --	----	----	----	----
Silver	EG005T	2	mg/kg	----	10	<2 --	----	----	----	----
Tin	EG005T	10	mg/kg	----	50	<10 --	----	----	----	----
Zinc	EG005T	5	mg/kg	----	200	58 ± 7	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 --	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 --	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 --	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	450	150 ± 40	----	----	----	----
<b>EP066: Polychlorinated Biphenyls (PCB)</b>										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 --	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 --	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 --	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 --	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 --	----	----	----	----



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	526_04_07_S	525_08_02_S	525_08_09_S	525_08_10_S	525_12_14_S
						S_Primary_ALS	S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	26-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00
						EM2209724-011 MU	EM2209724-012 MU	EM2209724-013 MU	EM2209724-014 MU	EM2209724-015 MU
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5	----	----	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5	----	----	----	----
<b>EP075I: Organochlorine Pesticides</b>										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20	----	----	----	----
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50	----	----	----	----



**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	525_16_09_Tr	525_16_15_S	525_20_04_S	525_20_14_S	526_00_03_S
						iplicate_ALS	S_Primary ALS	S_Triplicate_ ALS	S_Primary_AL S	S_Primary_AL S
				Lower Limit	Upper Limit	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	25-May-2022 15:00	26-May-2022 15:00
						EM2209724-016 MU	EM2209724-017 MU	EM2209724-018 MU	EM2209724-019 MU	EM2209724-020 MU
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										















**Soil Hazard Categorisation and Management**

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220 526_00_16_S S_Primary_AL S	SX_OB_20220 526_04_07_S S_Primary_AL S	----	----	----
				Sampling date/time						
				Lower Limit	Upper Limit					
						26-May-2022 15:00	26-May-2022 15:00			
						EM2209724-021 MU	EM2209724-022 MU			
<b>EA001: pH in soil using 0.01M CaCl extract</b>										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
<b>EG005(ED093T): Total Metals by ICP-AES</b>										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
<b>EK040T: Fluoride Total</b>										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
<b>EP074I: Volatile Halogenated Compounds</b>										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Halogenated)</b>										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>										













## QUALITY CONTROL REPORT

<b>Work Order</b>	<b>: EM2209724</b>	<b>Page</b>	: 1 of 31
<b>Client</b>	<b>: AGON ENVIRONMENTAL PTY LTD</b>	<b>Laboratory</b>	: Environmental Division Melbourne
<b>Contact</b>	: Craig Trimbur	<b>Contact</b>	: Josh Alexander
<b>Address</b>	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	<b>Address</b>	: 4 Westall Rd Springvale VIC Australia 3171
<b>Telephone</b>	: ----	<b>Telephone</b>	: +61-3-8549 9600
<b>Project</b>	: JC0927	<b>Date Samples Received</b>	: 26-May-2022
<b>Order number</b>	: ----	<b>Date Analysis Commenced</b>	: 26-May-2022
<b>C-O-C number</b>	: 20220526044149-ALS-52	<b>Issue Date</b>	: 02-Jun-2022
<b>Sampler</b>	: Martha, TB		
<b>Site</b>	: 20220526044149-ALS-52		
<b>Quote number</b>	: EN/150/19 -WGTP -Bulk Sample Quote		
<b>No. of samples received</b>	: 24		
<b>No. of samples analysed</b>	: 24		



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
Jarvis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



## General Comments

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

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

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

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

## Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4366422)</b>									
EM2209587-002	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	22	25	9.2	0% - 50%
EM2209587-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	9	10	14.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	15	15.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	30	12	84.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	50	65	26.4	0% - 50%
EM2209724-005	SX_OB_20220525_16_09_ Triplicate_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	109	106	2.5	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	125	126	1.2	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	60	48	21.9	0% - 50%
		EG005T: Copper	7440-50-8	5	mg/kg	50	47	6.3	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	6	<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	73	73	0.0	0% - 50%		

**EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4370647)**



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 (%)
<b>EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4370647) - continued</b>									
EM2209720-004	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.0	8.0	0.0	0% - 20%
EM2209724-007	SX_IB_20220525_20_04_S S_Triplicate_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	9.1	9.1	0.0	0% - 20%
<b>EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4367925)</b>									
EM2209700-003	Anonymous	EA055: Moisture Content	----	0.1	%	5.3	5.7	6.8	No Limit
EM2209724-005	SX_OB_20220525_16_09_ Triplicate_ALS	EA055: Moisture Content	----	0.1	%	30.5	31.6	3.5	0% - 20%
<b>EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4366423)</b>									
EM2209587-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209724-005	SX_OB_20220525_16_09_ Triplicate_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4367888)</b>									
EM2209380-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2209611-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4367889)</b>									
EM2209724-008	SX_OB_20220525_20_14_ SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	1.5	1.3	12.0	No Limit
EM2209988-004	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.8	<0.8	0.0	No Limit
<b>EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4371220)</b>									
EM2209380-003	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	2	2	0.0	No Limit
EM2209612-006	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
<b>EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4371223)</b>									
EM2209724-003	SX_OB_20220525_08_10_ SS_Duplicate_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2209756-002	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
<b>EK040T: Fluoride Total (QC Lot: 4367870)</b>									
EM2209380-003	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	130	150	13.3	No Limit
EM2209611-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	380	430	12.4	0% - 50%
<b>EK040T: Fluoride Total (QC Lot: 4367871)</b>									
EM2209724-008	SX_OB_20220525_20_14_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	160	160	0.0	No Limit
EM2209988-006	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	90	80	15.5	No Limit
<b>EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4367805)</b>									
EM2209380-003	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209724-002	SX_OB_20220525_08_09_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4362773)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	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 (%)
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4362773) - continued</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2
EP074-UT: Toluene	108-88-3	0.5		mg/kg	<0.5	<0.5	0.0	No Limit	
EP074-UT: Ethylbenzene	100-41-4	0.5		mg/kg	<0.5	<0.5	0.0	No Limit	
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5		mg/kg	<0.5	<0.5	0.0	No Limit	
EP074-UT: Styrene	100-42-5	0.5		mg/kg	<0.5	<0.5	0.0	No Limit	
EP074-UT: ortho-Xylene	95-47-6	0.5		mg/kg	<0.5	<0.5	0.0	No Limit	
<b>EP074H: Naphthalene (QC Lot: 4362773)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
<b>EP074I: Volatile Halogenated Compounds (QC Lot: 4362773)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_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



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 (%)
<b>EP074I: Volatile Halogenated Compounds (QC Lot: 4362773) - continued</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ 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		
<b>EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4367803)</b>									
EM2209380-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EM2209724-002	SX_OB_20220525_08_09_ SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50
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



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 (%)
<b>EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4367803) - continued</b>									
EM2209724-002	SX_OB_20220525_08_09_ SS_Primary_ALS	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
<b>EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4367803)</b>									
EM2209380-003	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit		
EM2209724-002	SX_OB_20220525_08_09_ 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		
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4367803)</b>									
EM2209380-003	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit





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 (%)
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4367803) - continued</b>									
EM2209380-003	Anonymous	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
EM2209724-002	SX_OB_20220525_08_09_ 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		
<b>EP075I: Organochlorine Pesticides (QC Lot: 4367803)</b>									
EM2209380-003	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit



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 (%)
<b>EP075I: Organochlorine Pesticides (QC Lot: 4367803) - continued</b>									
EM2209380-003	Anonymous	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
EM2209724-002	SX_OB_20220525_08_09_ 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
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4362773)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4367804)</b>									
EM2209380-003	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	100	130	27.0	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	100	130	26.1	No Limit
EM2209724-002	SX_OB_20220525_08_09_ 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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4362773)</b>									



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 (%)
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4362773) - continued</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_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
EM2209724-011	SX_OB_20220526_04_07_ 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
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4367804)</b>									
EM2209380-003	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	110	140	27.3	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	110	140	24.0	No Limit
EM2209724-002	SX_OB_20220525_08_09_ 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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4372269)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372269)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



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 (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372269) - continued</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	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
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
		<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372269)</b>							
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



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 (%)
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372269) - continued</b>									
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372269)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
<b>EP231P: PFAS Sums (QC Lot: 4372269)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
EM2209724-011	SX_OB_20220526_04_07_ SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit

Sub-Matrix: **WATER** Laboratory Duplicate (DUP) Report

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4370880)</b>									
EM2209714-001	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



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 (%)
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4370880) - continued</b>									
EM2209714-001	Anonymous	EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4372237)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209724-010	SX_OB_20220526_00_16_ 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
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4372238)</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209724-020	SX_IB_20220526_00_03_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4370880)</b>									
EM2209714-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit



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 (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4370880) - continued</b>									
EM2209714-001	Anonymous	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
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372237)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		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
EM2209724-010	SX_OB_20220526_00_16_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372238)</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit



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 (%)
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4372238) - continued</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2209724-020	SX_IB_20220526_00_03_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4370880)</b>									
EM2209714-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372237)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit





Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372237) - continued</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209724-010	SX_OB_20220526_00_16_ 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
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372238)</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_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
EM2209724-020	SX_IB_20220526_00_03_S S_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



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 (%)
<b>EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4372238) - continued</b>									
EM2209724-020	SX_IB_20220526_00_03_S S_Primary_ALS	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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4370880)</b>									
EM2209714-001	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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372237)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209724-010	SX_OB_20220526_00_16_ 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
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372238)</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit



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 (%)
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4372238) - continued</b>									
EM2209724-020	SX_IB_20220526_00_03_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
<b>EP231P: PFAS Sums (QC Lot: 4370880)</b>									
EM2209714-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
<b>EP231P: PFAS Sums (QC Lot: 4372237)</b>									
EM2209724-001	SX_IB_20220525_08_02_S S_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
EM2209724-010	SX_OB_20220526_00_16_ 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
<b>EP231P: PFAS Sums (QC Lot: 4372238)</b>									
EM2209724-012	SX_IB_20220525_08_02_S S_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
EM2209724-020	SX_IB_20220526_00_03_S S_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



## 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	
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4366422)</b>								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	92.2	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	58.3	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	95.1	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	88.7	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	101	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	75.8	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	90.4	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	73.2	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	77.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	72.5	70.0	130
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4368209)</b>								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.1	----	----	----	----
<b>EA001: pH in soil using 0.01M CaCl extract (QCLot: 4370647)</b>								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	100	98.8	101
					7 pH Unit	99.6	99.3	101
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 4366423)</b>								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	88.3	70.0	130
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4367888)</b>								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	85.8	70.0	130
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4367889)</b>								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	83.8	70.0	130
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4371220)</b>								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	119	70.0	130
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4371223)</b>								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	116	70.0	130
<b>EK040T: Fluoride Total (QCLot: 4367870)</b>								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	78.8	75.2	110
<b>EK040T: Fluoride Total (QCLot: 4367871)</b>								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	76.5	75.2	110
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4367805)</b>								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	110	67.4	136
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4362773)</b>								



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	
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4362773) - continued</b>									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	98.4	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	93.4	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	95.2	66.6	115	
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	79.2	65.2	112	
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	82.1	69.4	111	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	94.2	68.4	110	
<b>EP074H: Naphthalene (QCLot: 4362773)</b>									
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	95.8	72.3	114	
<b>EP074I: Volatile Halogenated Compounds (QCLot: 4362773)</b>									
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	70.8	47.0	138	
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	74.6	57.6	125	
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	78.5	72.3	115	
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	75.6	60.5	122	
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	84.8	70.3	112	
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	81.1	66.6	115	
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	79.4	64.4	122	
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	76.4	58.4	127	
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	85.0	72.9	114	
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	82.2	64.7	115	
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	86.0	72.6	116	
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	73.6	60.0	119	
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	82.1	71.8	116	
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	95.4	66.1	116	
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	71.4	39.8	128	
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	81.2	70.3	113	
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	80.2	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	81.2	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	75.8	48.4	120	
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4367803)</b>									
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	108	74.5	126	
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	102	72.7	126	
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	103	73.5	132	
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	104	72.8	128	
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	103	73.3	134	
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	103	72.4	128	
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	105	69.4	126	



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
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4367803) - continued</b>								
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	107	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	99.4	54.4	135
<b>EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4367803)</b>								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	106	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	115	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	104	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	105	70.9	133
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	102	71.8	132
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	93.6	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	121	65.3	134
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	103	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	105	62.0	128
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	101	34.5	137
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4367803)</b>								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	102	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	102	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	102	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	105	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	104	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	104	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	104	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	104	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	108	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	108	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	109	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	108	65.1	130
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	108	72.1	134
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	108	72.9	135
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	108	71.3	134
<b>EP075I: Organochlorine Pesticides (QCLot: 4367803)</b>								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	103	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	102	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	104	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	104	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	104	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	105	75.5	131



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	
<b>EP075I: Organochlorine Pesticides (QCLot: 4367803) - continued</b>									
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	104	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	104	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	102	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	102	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	105	69.4	134	
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	103	71.0	132	
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	105	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	105	69.0	143	
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	107	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	107	71.4	135	
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	106	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	106	70.2	135	
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	106	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	109	63.6	135	
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4362773)</b>									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	91.0	61.1	119	
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4367804)</b>									
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	86.2	74.4	129	
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	98.5	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	91.9	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	95.0	70.0	130	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4362773)</b>									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	93.0	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTE X	10	mg/kg	<10	----	----	----	----	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4367804)</b>									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	98.2	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	98.3	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	91.2	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	98.0	70.0	130	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372269)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	114	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	89.8	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	77.7	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	89.7	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	97.5	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	87.1	59.0	134	
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372269)</b>									



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	
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372269) - continued</b>									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	96.5	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.4	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.1	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.6	69.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	117	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.4	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.9	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.2	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	127	69.0	133	
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372269)</b>									
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	117	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	94.4	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	102	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	97.1	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.3	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	109	61.0	139	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372269)</b>									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	92.7	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	98.8	64.0	140	
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	112	65.0	137	
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	117	70.0	130	
<b>EP231P: PFAS Sums (QCLot: 4372269)</b>									
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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370880)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	104	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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370880) - continued</b>									
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	91.9	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	84.9	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.1	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	88.7	53.0	142	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372237)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	117	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	91.2	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.4	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	104	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	104	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	95.4	53.0	142	
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372238)</b>									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	106	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	106	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	105	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	98.2	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	102	53.0	142	
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370880)</b>									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	104	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	92.4	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	95.9	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.0	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	98.6	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	97.1	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	105	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	110	71.0	132	
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372237)</b>									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	105	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	120	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	105	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	109	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
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372237) - continued</b>								
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	102	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	104	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	125	71.0	132
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372238)</b>								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	107	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	105	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	101	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.5	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	100	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	98.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	108	71.0	132
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370880)</b>								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	91.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	122	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	108	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	100	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	110	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372237)</b>								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	105	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	132	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	125	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	96.9	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	92.5	65.0	136



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
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372237) - continued</b>								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	103	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372238)</b>								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.4	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	116	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	105	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	103	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	100	61.0	135
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370880)</b>								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	89.9	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	94.3	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	125	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372237)</b>								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	104	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	119	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	113	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	100	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372238)</b>								
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	100	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	112	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	98.5	70.0	130
<b>EP231P: PFAS Sums (QCLot: 4370880)</b>								
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	----	----	----	----
<b>EP231P: PFAS Sums (QCLot: 4372237)</b>								
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	High
<b>EP231P: PFAS Sums (QCLot: 4372237) - continued</b>									
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----	
<b>EP231P: PFAS Sums (QCLot: 4372238)</b>									
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----	
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----	
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----	

### Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%) MS	Acceptable Limits (%)	
				Low	High		
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4366422)</b>							
EM2209611-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	93.0	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	90.8	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	92.7	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	91.9	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	89.0	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	92.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	86.5	80.0	120
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 4366423)</b>							
EM2209611-001	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	107	76.0	116
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4367888)</b>							
EM2209380-005	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 6.1	58.0	114
EM2209380-005	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 34.2	58.0	114
<b>EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4367889)</b>							
EM2209724-009	SX_IB_20220526_00_03_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	87.6	58.0	114
EM2209724-009	SX_IB_20220526_00_03_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	97.0	58.0	114
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4371220)</b>							
EM2209380-005	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	112	70.0	130
<b>EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4371223)</b>							
EM2209724-004	SX_OB_20220525_12_14_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	95.1	70.0	130
<b>EK040T: Fluoride Total (QCLot: 4367870)</b>							
EM2209380-005	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	79.7	70.0	130



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
Laboratory sample ID		Sample ID	Method: Compound	CAS Number	Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low High
<b>EK040T: Fluoride Total (QCLot: 4367871)</b>							
EM2209724-009	SX_IB_20220526_00_03_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	77.5	70.0	130
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4367805)</b>							
EM2209380-011	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	98.9	59.6	152
<b>EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4362773)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	92.4	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	90.5	55.1	124
<b>EP074I: Volatile Halogenated Compounds (QCLot: 4362773)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	72.0	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	74.3	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	73.6	55.5	122
<b>EP075A: Phenolic Compounds (Halogenated) (QCLot: 4367803)</b>							
EM2209380-005	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	103	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	105	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	119	10.0	144
<b>EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4367803)</b>							
EM2209380-005	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	105	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	106	34.2	129
<b>EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4367803)</b>							
EM2209380-005	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	100.0	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	99.0	37.8	152
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4362773)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	75.4	42.3	111
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 4367804)</b>							
EM2209380-008	Anonymous	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	102	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	103	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	92.4	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	100	70.0	130
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4362773)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	66.3	39.9	109
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4367804)</b>							
EM2209380-008	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	102	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	102	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	87.1	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	102	70.0	130
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372269)</b>							



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372269) - continued</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	96.7	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	73.0	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	72.1	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	99.9	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	92.8	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	78.3	59.0	134
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372269)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	72.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	82.2	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	104	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	91.8	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	90.3	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	120	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	87.4	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	92.9	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	88.2	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	73.9	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	119	69.0	133		
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372269)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	109	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	103	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	76.9	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	97.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	89.0	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	96.1	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	110	61.0	139
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372269)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	92.4	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	106	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	113	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	77.4	70.0	130

Sub-Matrix: **WATER**

Matrix Spike (MS) Report		
Spike	SpikeRecovery(%)	Acceptable Limits (%)



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4370880)</b>							
EM2209714-002	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	81.9	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	70.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	83.5	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	72.4	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	66.8	53.0	142
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372237)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	110	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	79.6	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	86.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	100	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	97.4	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	87.3	53.0	142
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4372238)</b>							
EM2209724-013	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	114	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	103	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	103	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	114	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	111	53.0	142
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4370880)</b>							
EM2209714-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	79.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	90.6	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	84.3	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	87.8	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	81.1	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	87.8	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	81.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	73.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	85.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	75.6	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	90.6	71.0	132
		<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372237)</b>					
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	78.5	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	100	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	114	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	100	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.5	71.0	133



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372237) - continued</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	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	98.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	99.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	96.7	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	93.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	125	71.0	132
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4372238)</b>							
EM2209724-013	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	103	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	110	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	114	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	111	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	107	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	106	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	114	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	104	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	105	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	92.5	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	114	71.0	132
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4370880)</b>							
EM2209714-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	79.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	90.2	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	79.4	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	93.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	82.9	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	89.0	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	95.7	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372237)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	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	124	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	125	70.0	130





Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372237) - continued</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	92.3	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	93.1	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	106	61.0	135
<b>EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4372238)</b>							
EM2209724-013	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	112	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	122	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	116	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	116	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	113	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	103	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	102	61.0	135
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4370880)</b>							
EM2209714-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	73.4	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	76.5	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	88.0	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	82.7	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372237)</b>							
EM2209724-002	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	118	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	107	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	119	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	77.5	70.0	130
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4372238)</b>							
EM2209724-013	SX_OB_20220525_08_09_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	119	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	134	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	124	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	71.6	70.0	130

## QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2209724	Page	: 1 of 16
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 26-May-2022
Site	: 20220526044149-ALS-52	Issue Date	: 02-Jun-2022
Sampler	: Martha, TB	No. of samples received	: 24
Order number	: ----	No. of samples analysed	: 24

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

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

### Summary of Outliers

#### Outliers : Quality Control Samples

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

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

#### Outliers : Analysis Holding Time Compliance

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

#### Outliers : Frequency of Quality Control Samples

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



### Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
<b>Matrix Spike (MS) Recoveries</b>							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2209380--005	Anonymous	Hexavalent Chromium	18540-29-9	6.1 %	58.0-114%	Recovery less than lower data quality objective
EG048: Hexavalent Chromium (Alkaline Digest)	EM2209380--005	Anonymous	Hexavalent Chromium	18540-29-9	34.2 %	58.0-114%	Recovery less than lower data quality objective

### Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
<b>EA001: pH in soil using 0.01M CaCl extract</b>								
<b>Soil Glass Jar - Unpreserved (EA001)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	31-May-2022	01-Jun-2022	✓	31-May-2022	31-May-2022	✓
<b>Soil Glass Jar - Unpreserved (EA001)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	31-May-2022	02-Jun-2022	✓	31-May-2022	31-May-2022	✓
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
<b>Soil Glass Jar - Unpreserved (EA055)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	----	----	----	30-May-2022	08-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EA055)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	----	----	----	30-May-2022	09-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	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
<b>Soil Glass Jar - Unpreserved (EG005T)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	21-Nov-2022	✓	30-May-2022	21-Nov-2022	✓
<b>Soil Glass Jar - Unpreserved (EG005T)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	22-Nov-2022	✓	30-May-2022	22-Nov-2022	✓
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
<b>Soil Glass Jar - Unpreserved (EG035T)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	22-Jun-2022	✓	31-May-2022	22-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EG035T)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	23-Jun-2022	✓	31-May-2022	23-Jun-2022	✓
<b>EG048: Hexavalent Chromium (Alkaline Digest)</b>								
<b>Soil Glass Jar - Unpreserved (EG048G)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	22-Jun-2022	✓	31-May-2022	06-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EG048G)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	23-Jun-2022	✓	31-May-2022	06-Jun-2022	✓
<b>EK026SF: Total CN by Segmented Flow Analyser</b>								
<b>Soil Glass Jar - Unpreserved (EK026SF)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	31-May-2022	08-Jun-2022	✓	01-Jun-2022	14-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EK026SF)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	31-May-2022	09-Jun-2022	✓	01-Jun-2022	14-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	
<b>EK040T: Fluoride Total</b>								
<b>Soil Glass Jar - Unpreserved (EK040T)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	22-Jun-2022	✓	02-Jun-2022	22-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EK040T)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	23-Jun-2022	✓	02-Jun-2022	23-Jun-2022	✓
<b>EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	21-Nov-2022	✓	----	----	----
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	22-Nov-2022	✓	----	----	----
<b>EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)</b>								
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	21-Nov-2022	✓	----	----	----
<b>Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	22-Nov-2022	✓	----	----	----
<b>EP066: Polychlorinated Biphenyls (PCB)</b>								
<b>Soil Glass Jar - Unpreserved (EP066-EM)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP066-EM)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-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	
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	27-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	27-May-2022	02-Jun-2022	✓	27-May-2022	02-Jun-2022	✓
<b>EP074H: Naphthalene</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	27-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	27-May-2022	02-Jun-2022	✓	27-May-2022	02-Jun-2022	✓
<b>EP074I: Volatile Halogenated Compounds</b>								
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	27-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	27-May-2022	02-Jun-2022	✓	27-May-2022	02-Jun-2022	✓
<b>EP075A: Phenolic Compounds (Halogenated)</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-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	
<b>EP075A: Phenolic Compounds (Non-halogenated)</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>EP075I: Organochlorine Pesticides</b>								
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220525_08_02_SS_Primary_ALS, SX_IB_20220525_08_10_SS_Duplicate_ALS, SX_IB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓
<b>Soil Glass Jar - Unpreserved (EP075-EM)</b>								
SX_IB_20220526_00_03_SS_Primary_ALS, SX_IB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-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		
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	27-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	27-May-2022	02-Jun-2022	✓	27-May-2022	02-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-Jul-2022	✓	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	27-May-2022	01-Jun-2022	✓	27-May-2022	01-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	30-May-2022	08-Jun-2022	✓	30-May-2022	09-Jul-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP074-UT)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	27-May-2022	02-Jun-2022	✓	27-May-2022	02-Jun-2022	✓	
<b>Soil Glass Jar - Unpreserved (EP071-EM)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	30-May-2022	09-Jun-2022	✓	30-May-2022	09-Jul-2022	✓	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	01-Jun-2022	21-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓	
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	01-Jun-2022	22-Nov-2022	✓	01-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	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	01-Jun-2022	21-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	01-Jun-2022	22-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>EP231C: Perfluoroalkyl Sulfonamides</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	01-Jun-2022	21-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	01-Jun-2022	22-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	01-Jun-2022	21-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	01-Jun-2022	22-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>EP231P: PFAS Sums</b>								
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS	25-May-2022	01-Jun-2022	21-Nov-2022	✓	01-Jun-2022	11-Jul-2022	✓
<b>HDPE Soil Jar (EP231X)</b> SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	SX_OB_20220526_00_16_SS_Primary_ALS,	26-May-2022	01-Jun-2022	22-Nov-2022	✓	01-Jun-2022	11-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



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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
<b>HDPE (no PTFE) (EP231X)</b> SX_OB_20220525_08_22_SB_Blank_ALS,	SX_OB_20220525_08_33_SB_Rinsate_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	21-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS, SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS, SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-2022	✓	01-Jun-2022	26-Nov-2022	✓
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
<b>HDPE (no PTFE) (EP231X)</b> SX_OB_20220525_08_22_SB_Blank_ALS,	SX_OB_20220525_08_33_SB_Rinsate_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	21-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS, SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS, SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-2022	✓	01-Jun-2022	26-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		
<b>EP231C: Perfluoroalkyl Sulfonamides</b>									
<b>HDPE (no PTFE) (EP231X)</b>									
SX_OB_20220525_08_22_SB_Blank_ALS,	SX_OB_20220525_08_33_SB_Rinsate_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	21-Nov-2022	✓	
<b>HDPE (no PTFE) (EP231X)</b>									
SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS, SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS, SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-2022	✓	01-Jun-2022	26-Nov-2022	✓	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
<b>HDPE (no PTFE) (EP231X)</b>									
SX_OB_20220525_08_22_SB_Blank_ALS,	SX_OB_20220525_08_33_SB_Rinsate_ALS	25-May-2022	31-May-2022	21-Nov-2022	✓	31-May-2022	21-Nov-2022	✓	
<b>HDPE (no PTFE) (EP231X)</b>									
SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS, SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS, SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	30-May-2022	01-Jun-2022	26-Nov-2022	✓	01-Jun-2022	26-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	
<b>EP231P: PFAS Sums</b>								
<b>HDPE (no PTFE) (EP231X)</b> SX_OB_20220525_08_22_SB_Blank_ALS,	SX_OB_20220525_08_33_SB_Rinsate_ALS	<b>25-May-2022</b>	<b>31-May-2022</b>	21-Nov-2022	✓	<b>31-May-2022</b>	21-Nov-2022	✓
<b>HDPE (no PTFE) (EP231X)</b> SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS, SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS,	SX_OB_20220525_08_09_SS_Primary_ALS, SX_OB_20220525_12_14_SS_Primary_ALS, SX_OB_20220525_16_15_SS_Primary_ALS, SX_OB_20220525_20_14_SS_Primary_ALS, SX_OB_20220526_00_16_SS_Primary_ALS, SX_IB_20220525_08_02_SS_Primary_ALS, SX_OB_20220525_08_10_SS_Duplicate_ALS, SX_OB_20220525_16_09_Triplicate_ALS, SX_IB_20220525_20_04_SS_Triplicate_ALS, SX_IB_20220526_00_03_SS_Primary_ALS, SX_OB_20220526_04_07_SS_Primary_ALS	<b>30-May-2022</b>	<b>01-Jun-2022</b>	26-Nov-2022	✓	<b>01-Jun-2022</b>	26-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	
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	19	15.79	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Laboratory Control Samples (LCS)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Method Blanks (MB)</b>							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	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	
<b>Analytical Methods</b>							
<b>Matrix Spikes (MS)</b>							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	11	9.09	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	
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	5	38	13.16	10.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Laboratory Control Samples (LCS)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	38	7.89	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Method Blanks (MB)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	38	7.89	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Matrix Spikes (MS)</b>							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	38	7.89	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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> ) (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 <sub>2</sub> which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).



Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> SO <sub>4</sub> and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.





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