

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

1. Motherhub Summary

Source TBM/Bin at Pivot	2	Source Geological Domain	3
Approx. Source Tunnel Chainage From	273	Approx. Source Tunnel Chainage To	280
Approx. Rings From	117	Approx. Rings To	120
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	F03.01	Start of Filling From (Time / date)	16/05/2022
Tonnes Put in Holding Bay No:	6249.23	Finish of Filling (Time / Date)	17/05/2022
Classified Volume (LCM)	3905.77	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1 : 244.11	Approx. Bank Cubic Meters (BCM)	1337.94

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

Table 3.1 - Applicable Sample ID's

Table 3.1 - 1 Applicable Sample ID's

Applicable Spoil Sample ID's		
SX_IB_20220516_12_15_SS_Primary_EUF	SX_IB_20220517_00_01_SS_Primary_ALS	SX_IB_20220525_14_46_SS_Duplicate_EUF
SX_IB_20220516_12_20_SS_Primary_EUF	SX_IB_20220517_00_05_SS_Primary_EUF	SX_IB_20220525_14_49_SS_Triplicate_ALS
SX_IB_20220516_16_08_SS_Primary_ALS	SX_IB_20220517_03_57_SS_Primary_EUF	SX_IB_20220525_14_52_SS_Primary_ALS
SX_IB_20220516_16_12_SS_Primary_ALS	SX_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
SX_IB_20220516_20_00_SS_Primary_EUF	SX_IB_20220525_14_42_SS_Primary_EUF	SX_IB_20220525_14_58_SS_Triplicate_EUF
SX_IB_20220516_20_04_SS_Primary_ALS		
Total Sample Numbers	16	Ratio Acceptable
Primary Sample Numbers	12	Yes
Classified Volume (LCM)	3905.77 m ³	
Volume: Sample Number Ratio (Samples per LCM)	1 : 244.11	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

3.3 Selection of the Spoil Sample Testing Regime

Table 3.3 - 1 Selection of the Spoil Sample Testing Regime

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

3.4 Spoil Compliance with SAQP Criteria for Containment Cell

Table 3.4 - 1 Spoil Compliance with SAQP Criteria for Containment Cell

Need for IWRG 621.1 or 655.1 Testing	
A. Is Spoil in this Holding Bay from a Zone of Exception or Anomalous and required testing for IWRG 621.1?	No
B. Is IWRG 621.1 testing required for spoil in this Holding Bay, because prior to this Holding Bay, less than 10 Holding Bays of spoil have been tested from this Domain?	Yes
C. Is IWRG 621.1 testing required for spoil in this Holding Bay, because the moving 95% UCL values for the previous 10 consecutive Holding Bays of spoil from this Domain are not below TCO?	No
D. Is testing pursuant to IWRG 655.1 required for spoil in this Holding Bay, because the spoil comes from Exception Zone 3 (See SAQP Section 5.4)?	No
E. Has spoil testing for IWRG 621.1 Parameters been triggered by results of spoil water tests for previous Holding Bays of spoil from this geological domain?	No
Outcome from IWRG 621.1 testing (if needed)	
F. If Yes to one or more Questions A, B, C or E, (and not NOC< applicable background concentrations) then do test results for IWRG 621.1 (see Table 3.4-2) prohibit NPIW Containment as a spoil Classification Outcome? If no to all of Questions A, B, C and E, then respond NA to this question.	No
Outcome from IWRG 655.1 testing (if needed)	
G. If Yes to Questions D, then do test results for IWRG 655.1 (see Table 3.4-3) permit NPIW Containment as a spoil Classification Outcome? If no to Question D, respond NA to this question	NA
Outcome from PFAS Testing	
H. Do test results for PFAS (see Table 3.4-4 below) permit NPIW Containment as a spoil Classification Outcome?	Yes
<i>If Yes to either or both of Question E or F, then Spoil is Not Suitable for Containment; Go to Section 3.5. Otherwise, it is Suitable for Containment</i>	
Notes:	
<ol style="list-style-type: none"> 1. Criteria taken from EPA Grandfathered Classifications for TBM Spoil (2020/476 (SO 9042848)), and from the EPA approved EMP for Hi Quality's Containment Cell 	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

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	16*	12	1 : 244.11	16	23	36.81	41.12	61	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Chromium (Hexavalent)	mg/kg	1	16*	12	1 : 244.11	5	<1.0	1.08	N/A	1.2	1	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Nickel	mg/kg	5	16*	12	1 : 244.11	16	148	185	200.9	280	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)

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---	-------------------------	---

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	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

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	16*	12	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	16*	12	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	16*	12	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	16*	12	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	16*	12	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	16*	12	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	16*	12	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)

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

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

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

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	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

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												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

4. Comments and Limitations

Comments and Limitations	
1.	<p>Naturally Occurring Chemicals listed in IWRG 621.1 that are within the Background range despite being reported at concentrations that would otherwise categorise the material as PIW:</p> <ol style="list-style-type: none"> 1. Technical discussion around the naturally occurring metal concentrations found in soils beneath the WGTP is detailed in <i>Golder (2017b) – Technical Report B, Appendix E – Environmental characterisation of spoil (natural soil and rock)</i>. The report indicates that elevated metals (including arsenic, nickel, copper, chromium (CrVI), zinc and mercury) were considered to be associated with natural enrichment instead of anthropogenic contamination. <ol style="list-style-type: none"> a. Arsenic – <i>Golder (2017b) – Technical Report B, Appendix E section 6.2 Arsenic enrichment in the residual soil of the upper Older Volcanics (Tvo1)</i> found that while the soil of the upper Older Volcanics sub-unit contains arsenic, the arsenic is not characteristic of the wider sub unit (i.e the rock) or the lower sub-unit (soil or rock). The concentration of arsenic therefore appears to be related to the chemical and biological weather of the unit over time. This is further supported by: <ol style="list-style-type: none"> i. The residual soil of the sub-unit being characterised by iron-oxide staining and containing goethite. Goethite is an iron oxyhydroxide mineral, which can contain elevated concentrations of arsenic. <p>Golder therefore concluded that based on the broad vertical distribution of arsenic and the presence of arsenic throughout the greater project area, arsenic results in Upper Older Volcanics soil are not likely to be associated with anthropogenic contamination.</p> b. Nickel – <i>Golder (2017b) – Technical Report B, Appendix E section 6.3 Nickel enrichment within the upper Older Volcanics</i> found that <ol style="list-style-type: none"> i. Nickel is known to be enriched within olivine and pyroxene basalt minerals, leading to nickel enrichment of soils weathered from basalt (Martini and Chesworth, 2013). ii. The reported mean nickel concentrations within the Older Volcanics (Tvo) were comparable to results reported within soils derived from basalt in Auckland and basalt rock of Finland (ARC, 2001; Koljonen, 1992), Older Volcanics observed in the Melbourne Metro Project (Golder, 1026a) and Newer Volcanics basalt of the Westenra Plains (Birch, 2003). iii. Enriched nickel concentrations corresponded with enriched cobalt (all units) and iron (except tertiary volcanics (Tvo2) soil) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

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.*

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

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

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

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

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

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

- A similar ratio of test results >1mg/kg compared to the overall data set;
- If a ½ LOR is substituted for results reported as <LOR (of 1mg/kg), then like the AJJV 95% UCL, the calculation is <1mg/kg

The results also show that there are no synthetic compounds reported above the laboratory LOR, another indication that anthropogenic contamination is not present

2.	Test result outcomes can lead to two classification possibilities; however, the classification decision follows the preference of the waste management hierarchy.
3.	Spoil is not from a “Zone of Exception”. Zone of exception applies a sampling ratio of only Primary Samples to LCM to categorise spoil as per the SAQP revision 5. Sample to categorised volume ratio in zones of exception is to be as per IWRG702 with 1 primary spoil sample categorising a maximum 250 m3 of spoil.

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---	--------------------------------	---

4.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes
5.	This report has been prepared in accordance with industry recognised standards and procedures current at the time of the work. The report presents the results of the assessment based on the quoted scope of works (unless otherwise agreed in writing) for the specific purposes of the engagement by the Client. No warranties expressed or implied, are offered to any third parties and no liability will be accepted for use of this report by third parties.
6.	All information provided by third parties has been assumed to be correct and complete. Agon does not assume any liability for misrepresentation of information by third parties or for matters not visible, accessible or present on the subject site.
7.	Opinions and judgements expressed herein are based on Agon's understanding of current regulatory standards and should not be construed as legal opinions. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties other than those listed above.
8.	This report should be read in full.

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

5. Attachments

ATTACHMENT A: TABULATED RESULTS

ATTACHMENT B: 95% UCL AVE CALCULATIONS

ATTACHMENT C: LABORATORY CERTIFICATES

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

ATTACHMENT A: TABULATED RESULTS

								Metals								
								Asenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								2	0.4	5	5	1	5	0.1	5	5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																
EPA Victoria IWRG621 Category B Leached Upper Limits																
EPA Victoria IWRG621 Category B Upper Limits								2,000	400	20,000		2,000	6,000	300	4,000	12,000
EPA Victoria IWRG621 Category C Leached Upper Limits																
EPA Victoria IWRG621 Category C Upper Limits								500	100	5,000		500	1,500	75	1,000	3,000
EPA Victoria IWRG621 Fill Upper Limits								20	3	100		1	300	1	40	60

Location Code	Field ID	Sample Code	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample	Asenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF	M22-My0038908	16/05/2022	889101	MGT	Normal		48	<0.4	92	190	<1	6.4	<0.1	<5	280
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF	M22-My0038921	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF	M22-My0038932	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF	M22-My0038909	16/05/2022	889101	MGT	Normal		43	<0.4	72	170	1.0	5.9	<0.1	<5	240
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF	M22-My0038922	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF	M22-My0038933	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS	EM2209011008	16/05/2022	EM2209011	ALSE-Melbourne	Normal		37	<1	61	102	<1.0	<5	<0.1	<5	148
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS	EM2209011019	16/05/2022	EM2209011	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS	EM2209011007	16/05/2022	EM2209011	ALSE-Melbourne	Normal		43	<1	53	104	<1.0	<5	<0.1	<5	155
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS	EM2209011018	16/05/2022	EM2209011	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	M22-My0038914	16/05/2022	889101	MGT	Normal		46	<0.4	67	120	<1	<5	<0.1	<5	190
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	M22-My0038925	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	M22-My0038936	16/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS	EM2209011010	16/05/2022	EM2209011	ALSE-Melbourne	Normal		34	<1	56	106	<1.0	<5	<0.1	<5	158
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS	EM2209011021	16/05/2022	EM2209011	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS	EM2209011012	17/05/2022	EM2209011	ALSE-Melbourne	Normal		29	<1	48	116	<1.0	<5	<0.1	<5	148
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS	EM2209011023	17/05/2022	EM2209011	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF	M22-My0038917	17/05/2022	889101	MGT	Normal		41	<0.4	61	130	<1	<5	<0.1	<5	180
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF	M22-My0038928	17/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF	M22-My0038939	17/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF	M22-My0038918	17/05/2022	889101	MGT	Normal		61	<0.4	88	130	<1	<5	<0.1	<5	210
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF	M22-My0038929	17/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF	M22-My0038940	17/05/2022	889101	MGT	Normal										
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS	EM2209011013	17/05/2022	EM2209011	ALSE-Melbourne	Normal		30	<1	68	112	1.1	<5	<0.1	<5	200
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS	EM2209011024	17/05/2022	EM2209011	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	M22-My0061154	25/05/2022	891648	Eurofins Environment ANZ	Normal		27	<1	63	120	<1	<5	<0.1	<5	180
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	M22-My0061166	25/05/2022	891648	Eurofins Environment ANZ	Normal										
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	M22-My0061176	25/05/2022	891648	Eurofins Environment ANZ	Normal										
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	M22-My0061155	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061154	23	<1	55	110	<1	<5	<0.1	<5	180
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	M22-My0061167	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061166									
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	M22-My0061177	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061176									
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	EM2209669008	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061154	36	<1	56	89	1.0	<5	<0.1	<5	160
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	EM2209669020	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061176									
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	EM2209669009	25/05/2022	EM2209669	ALSE-Melbourne	Normal		28	<1	56	88	1.2	<5	<0.1	<5	161
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	EM2209669021	25/05/2022	EM2209669	ALSE-Melbourne	Normal										
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	EM2209669010	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669020	28	<1	54	96	1.1	<5	<0.1	<5	160
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	EM2209669022	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669009									
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	M22-My0061156	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669020	35	<1	74	140	<1	<5	0.1	<5	210
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	M22-My0061168	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669020									
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	M22-My0061178	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669009									

	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	PAH																
						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-cd)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	mg/kg
EQL	2	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) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																						
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-cd)pyrene	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF	<2	<2	<10	180			<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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF	<2	<2	<10	160			<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	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_16_08_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	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS																							
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS	<5	<2	<10	101	<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	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS																							
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	<2	<2	<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS	<5	<2	<10	90	<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	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS	<5	<2	<10	98	<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	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF	<2	<2	<10	130			<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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF	<2	<2	<10	200			<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	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS	<5	<2	<10	128	<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	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	<5	<2	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_46_SS_Duplicate_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	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	<5	<2	<10	92	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																							
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	<5	<2	<10	100	<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	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	<5	<2	<10	101	<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	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_58_SS_Triplicate_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	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							

	PAHs				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	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) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																						
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)	
F03.01	SX_IB_20220516_12_15_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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_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	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_16_08_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	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS																							
F03.01	SX_IB_20220516_16_12_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	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS																							
F03.01	SX_IB_20220516_20_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	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_04_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	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	<100	<100	<50	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_05_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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_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	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_04_05_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	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_46_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	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_49_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	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																							
F03.01	SX_IB_20220525_14_52_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	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_55_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	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_58_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	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							

	Organochlorine Pesticides																					
	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	α-BHC	β-BHC	γ-BHC
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
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) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																						
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	
F03.01	SX_IB_20220516_12_15_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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_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	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_16_08_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	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS																							
F03.01	SX_IB_20220516_16_12_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	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS																							
F03.01	SX_IB_20220516_20_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	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_04_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	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_01_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	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_05_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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_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	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_04_05_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	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_46_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	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_49_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	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																							
F03.01	SX_IB_20220525_14_52_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	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_55_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	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_58_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	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							

	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vlc	Other organochlorine pesticides EPA Vlc	Phenols																
						2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vlc	Phenols (non-halogenated) EPA Vlc	2,4-Dimethylphenol	2-Methylphenol
EQL	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Three	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 - 2019/405 (SO 9038560) Three																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																						
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	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPA Vlc	Other organochlorine pesticides EPA Vlc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPA Vlc	Phenols (non-halogenated) EPA Vlc	2,4-Dimethylphenol	2-Methylphenol	
F03.01	SX_IB_20220516_12_15_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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_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	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																							
F03.01	SX_IB_20220516_16_08_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	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS																							
F03.01	SX_IB_20220516_16_12_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	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS																							
F03.01	SX_IB_20220516_20_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	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																							
F03.01	SX_IB_20220516_20_04_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	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03		<20	<1.00	<20	<1	<1	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS																							
F03.01	SX_IB_20220517_00_05_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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_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	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																							
F03.01	SX_IB_20220517_04_05_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	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																							
F03.01	SX_IB_20220525_14_46_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	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																							
F03.01	SX_IB_20220525_14_49_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	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																							
F03.01	SX_IB_20220525_14_52_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	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS																							
F03.01	SX_IB_20220525_14_55_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	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																							
F03.01	SX_IB_20220525_14_58_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	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																							

	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	mg/kg
EQL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Three																							
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Three																							
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																							
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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		5.0		4.9												
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF									7.8		6.3												
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				8.4		180	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF									5.0		4.9												
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF									7.9		6.3												
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS							<0.1	1.3	5.1	7.7	5.0		160		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS									9.7														
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS							<0.1	1.3	5.1	7.6	5.0		120		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS									8.8														
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.4	160	33	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF									5.2		4.9												
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF									7.3		6.3												
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS							<0.1	1.2	5.0	7.7	5.0		110		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS									8.9														
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS							<0.1	1.6	5.2	7.2	5.0		120		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS									9.0														
F03.01	SX_IB_20220517_00_05_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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF									5.2		4.9												
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF									7.7		6.3												
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					8.0	130	33	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF									5.2		4.9												
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF									7.8		6.3												
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS							<0.1	1.5	5.0	8.3	5.0		130		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS									9.0														
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					7.9	180	27	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF									5.2		4.9												
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF									9.2		5.9												
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					6.9	110	25	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF									5.2		4.9												
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF									9.3		5.9												
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							<0.1	1.6	5.2	9.8	5.0		240		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS									10.2														
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS							<0.1	1.6	5.2	9.8	5.0		210		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS									10.2														
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS							<0.1	1.6	5.2	9.9	5.0		290		<5	<0.50	<0.50		<0.50			<0.50	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS									10.2														
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					6.6	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF									5.2		4.9												
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF									9.3		5.9												

	Halogenated Hydrocarbons					MAH						Solvents					SPOCAS
	Iodomethane	Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPA/Vic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
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) Three																	
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Three																	
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Three																	
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	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
F03.01	SX_IB_20220516_12_15_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	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																	
F03.01	SX_IB_20220516_12_15_SS_Primary_EUF																	
F03.01	SX_IB_20220516_12_20_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	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																	
F03.01	SX_IB_20220516_12_20_SS_Primary_EUF																	
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS							<0.5		<0.5								8.2
F03.01	SX_IB_20220516_16_08_SS_Primary_ALS																	
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS							<0.5		<0.5								7.8
F03.01	SX_IB_20220516_16_12_SS_Primary_ALS																	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																	
F03.01	SX_IB_20220516_20_00_SS_Primary_EUF																	
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS							<0.5		<0.5								7.8
F03.01	SX_IB_20220516_20_04_SS_Primary_ALS																	
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS							<0.5		<0.5								7.8
F03.01	SX_IB_20220517_00_01_SS_Primary_ALS																	
F03.01	SX_IB_20220517_00_05_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	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																	
F03.01	SX_IB_20220517_00_05_SS_Primary_EUF																	
F03.01	SX_IB_20220517_03_57_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	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																	
F03.01	SX_IB_20220517_03_57_SS_Primary_EUF																	
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS							<0.5		<0.5								7.8
F03.01	SX_IB_20220517_04_05_SS_Primary_ALS																	
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF																	
F03.01	SX_IB_20220525_14_46_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	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF																	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							<0.5		<0.5								8.0
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS							<0.5		<0.5								8.1
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS																	
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS							<0.5		<0.5								8.2
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																	
F03.01	SX_IB_20220525_14_58_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	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																	
F03.01	SX_IB_20220525_14_58_SS_Triplicate_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	0.4	5	5	1	5	0.1	5	5	2	2
Location Code	Field ID	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample											
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022	889101	MGT	Normal		22	<0.4	69	120	<1	<5	<0.1	<5	170	<2	<2
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038910	34	<0.4	86	140	<1	5.0	<0.1	<5	290	<2	<2
RPD							43	0	22	15	0	0	0	0	52	0	0
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022	889101	MGT	Normal		22	<0.4	69	120	<1	<5	<0.1	<5	170	<2	<2
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Interlab_D	M22-My0038910	23	<1	72	94	<1.0	<5	<0.1	<5	193	<5	<2
RPD							4	0	4	24	0	0	0	0	13	0	0
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038923											
RPD																	
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038934											
RPD																	
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Interlab_D	M22-My0038934											
RPD																	
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022	889101	MGT	Normal		27	<0.4	65	120	<1	<5	<0.1	<5	170	<2	<2
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038916	27	<0.4	87	110	<1	<5	<0.1	<5	220	<2	<2
RPD							0	0	29	9	0	0	0	0	26	0	0
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022	889101	MGT	Normal		27	<0.4	65	120	<1	<5	<0.1	<5	170	<2	<2
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Interlab_D	M22-My0038916	23	<1	57	96	<1.0	<5	<0.1	<5	152	<5	<2
RPD							16	0	13	22	0	0	0	0	11	0	0
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038927											
RPD																	
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF	16/05/2022	889101	MGT	Field_D	M22-My0038938											
RPD																	
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022	889101	MGT	Normal												
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Interlab_D	M22-My0038938											
RPD																	
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Normal		33	<1	54	98	<1.0	<5	<0.1	<5	134	<5	<2
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Field_D	EM2209011001	46	<1	59	110	<1.0	<5	<0.1	<5	170	<5	<2
RPD							33	0	9	12	0	0	0	0	24	0	0
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Normal		33	<1	54	98	<1.0	<5	<0.1	<5	134	<5	<2
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF	16/05/2022	889101	MGT	Interlab_D	EM2209011001	59	<0.4	93	170	<1	6.4	<0.1	<5	220	<2	<2
RPD							57	0	53	54	0	25	0	0	49	0	0
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Normal		33	<1	54	98	<1.0	<5	<0.1	<5	134	<5	<2
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF	16/05/2022	889101	MGT	Interlab_D	EM2209011001											
RPD																	
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Normal												
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Field_D	EM2209011014											
RPD																	
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS	16/05/2022	EM2209011	ALSE-Melbourne	Normal												
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF	16/05/2022	889101	MGT	Interlab_D	EM2209011014											
RPD																	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal		27	<1	63	120	<1	<5	<0.1	<5	180	<5	<2
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061154	23	<1	55	110	<1	<5	<0.1	<5	180	<5	<2
RPD							16	0	14	9	0	0	0	0	0	0	0
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal		27	<1	63	120	<1	<5	<0.1	<5	180	<5	<2
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061154	36	<1	56	89	1.0	<5	<0.1	<5	160	<5	<2
RPD							29	0	12	30	0	0	0	0	12	0	0
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061166											
RPD																	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061176											
RPD																	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061176											
RPD																	
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal		60	<1	78	160	<1	7.2	<0.1	<5	200	<5	<2
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061151	57	<1	66	130	<1	6.2	0.1	<5	200	<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							5	0	17	21	0	15	0	0	0	0	0
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal		60	<1	78	160	<1	7.2	<0.1	<5	200	<5	<2
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061151	36	<1	50	83	<1.0	<5	<0.1	<5	138	<5	<2
RPD							50	0	44	63	0	36	0	0	37	0	0
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061163											
RPD																	
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Field_D	M22-My0061173											
RPD																	
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	25/05/2022	891648	Eurofins Environment ANZ	Normal												
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061173											
RPD																	
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		46	<1	55	93	<1.0	<5	<0.1	<5	158	<5	<2
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669002	38	<1	50	112	<1.0	<5	<0.1	<5	152	<5	<2
RPD							19	0	10	19	0	0	0	0	4	0	0
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		46	<1	55	93	<1.0	<5	<0.1	<5	158	<5	<2
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669002	51	<1	50	150	<1	5.2	0.1	<5	130	<5	<2
RPD							10	0	10	47	0	4	0	0	19	0	0
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		46	<1	55	93	<1.0	<5	<0.1	<5	158	<5	<2
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669002											
RPD																	
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal												
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669014											
RPD																	
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal												
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669014											
RPD																	
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal												
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669017	41	<1	51	86	<1.0	<5	<0.1	<5	144	<5	<2
RPD																	
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal												
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669017	59	<1	57	110	<1	5.3	<0.1	<5	150	<5	<2
RPD																	
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal												
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669017											
RPD																	
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		49	<1	54	90	<1.0	<5	<0.1	<5	139	<5	<2
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669006											
RPD																	
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		49	<1	54	90	<1.0	<5	<0.1	<5	139	<5	<2
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669006											
RPD																	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061176											
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669020	28	<1	54	96	1.1	<5	<0.1	<5	160	<5	<2
RPD																	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061176											
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669020	35	<1	74	140	<1	<5	0.1	<5	210	<5	<2
RPD																	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Interlab_D	M22-My0061176											
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669020											
RPD																	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		28	<1	56	88	1.2	<5	<0.1	<5	161	<5	<2
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Field_D	EM2209669009											
RPD																	
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	25/05/2022	EM2209669	ALSE-Melbourne	Normal		28	<1	56	88	1.2	<5	<0.1	<5	161	<5	<2
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	25/05/2022	891648	Eurofins Environment ANZ	Interlab_D	EM2209669009											
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+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
RPD	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E06.02	<10	130		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E06.02	<10	92	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD	0	34			0	0	0	0	0	0	0	0			0		0	0	0	0	0	0
E06.02																						
E06.02																						
RPD																						
E06.02																						
E06.02																						
RPD																						
E06.02																						
E06.02																						
RPD																						
B02.03	<10	89	<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
B02.03	<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	<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
B02.03	<10	89	<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
B02.03	<10	87		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD	0	2			0	0	0	0	0	0	0	0			0		0	0	0	0	0	0
B02.03	<10	89	<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
B02.03																						
RPD																						
B02.03																						
B02.03																						
RPD																						
B02.03																						
B02.03																						
RPD																						
E06.02																						
E06.02	<10	88	<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																						
E06.02																						
E06.02	<10	96		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD																						
E06.02																						
E06.02																						
RPD																						
E06.02	<10	89	<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
E06.02																						
RPD																						
E06.02	<10	89	<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
E06.02																						
RPD																						
F03.01																						
F03.01	<10	101	<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																						
F03.01																						
F03.01	<10	140		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD																						
F03.01																						
F03.01																						
RPD																						
F03.01	<10	100	<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
F03.01																						
RPD																						
F03.01	<10	100	<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
F03.01																						
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 r
 ***Interlab Duplicates are matched on a per compound basis as methods vary betw

		3,4-Dimethylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NETFOSA)		N-ethyl-perfluorooctanesulfonamide doacetic acid (NETFOAAA)		N-ethylperfluorooctanesulfonamideethanol (NETFOSE)		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	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	
EQL		0.4	5	20	0.5	1	20	0.00001	0.005	0.00001	0.005	0.00005	0.01	0.00001	0.005	0.00005	0.005	0.00002	0.01	0.00005	0.005	0.00005	0.005	0.00005	0.005	
Location Code	Field ID																									
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	<0.4	<5	<20	<0.5	<1	<20		<0.005	<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF	<0.4	<5	<20	<0.5	<1	<20		<0.005	<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		
RPD		0	0	0	0	0	0		0	0		0		0		0		0		0		0		0		

Table with columns for chemical names (e.g., N-methylperfluorooctane sulfonamideacetic acid) and RPD values in mg/L and mg/kg. The table is organized into sections for PFOS/PFOA and other compounds, with rows for RPD and specific sample IDs (e.g., E06.02, B02.03, F03.01).

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

EQL	Sum of PFHKS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHKS + 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														
	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID																					
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF		<0.005	<0.005	<0.005	<0.005	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF		<0.005	<0.005	<0.005	<0.005	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF		<0.005	<0.005	<0.005	<0.005	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF		<0.005	<0.005	<0.005	<0.005	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF		<0.005	<0.005	<0.005	<0.005	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

	Sum of PFHKS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHKS + PFOS + PFOA)*	Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	
																				mg/L
RPD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E06.02	SX_OB_20220525_14_17_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	<0.5
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
RPD		0			0		0		0				0		0	0	0			
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS	<0.00001			<0.00001															
RPD		0			0															
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
RPD		0			0		0		0				0		0	0	0			
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	<0.00001	<0.0050	<0.0050	<0.00001	<0.0500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0			0		0		0				0		0	0	0			
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	<0.00001			<0.00001															
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS	<0.00001			<0.00001															
RPD		0			0															
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS	<0.00001			<0.00001															
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	<0.00001			<0.00001															
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
RPD		0			0															
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	<0.00001			<0.00001															
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	<0.00001	<0.0050	<0.0050	<0.00001	<0.0500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0			0															
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS	<0.00001			<0.00001															
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS	<0.00001			<0.00001															
RPD		0			0															
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	<0.00001			<0.00001															
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
RPD		0			0															
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	<0.00001			<0.00001															
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	<0.00001	<0.0050	<0.0050	<0.00001	<0.0500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD		0			0															
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS	<0.00001			<0.00001															
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	<0.00001	<0.00001	<0.00001	<0.0001															
RPD		0			0															
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS	<0.00001			<0.00001															
RPD		0			0															
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS	<0.00001	<0.0050		<0.00001	<0.0500	<0.50		<0.50				<0.50		<0.50	<0.50	<0.50			
F03.01	SX_IB_20220525_14_58_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
 ***Interlab Duplicates are matched on a per compound basis as methods vary betw

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					
E06.02	SX_OB_20220525_14_17_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
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50			<0.50	<0.50	<10.0	<0.01	31.1			
RPD		0	0	0	0	0	0	0	0	0		0			0	0	0					
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF																<0.05					
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF																<0.05					
RPD																	0					
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF																<0.05					
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF																<0.05					
RPD																	0					
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF																<0.05					
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS																<0.01					
RPD																						
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50			<0.50	<0.50	<10.0	<0.01	32.5			
B02.03	SX_OB_20220525_14_04_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	<0.01	32.5			
RPD		0	0	0	0	0	0	0	0	0		0			0	0	0		0			
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50			<0.50	<0.50	<10.0	<0.01	32.5			
B02.03	SX_OB_20220525_14_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					
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50			<0.50	<0.50	<10.0	<0.01	32.5			
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF																<0.05					
RPD																	0					
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS																<0.01					
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS																<0.01					
RPD																	0					
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS																<0.01					
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF																<0.05					
RPD																						
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS																<0.01					
E06.02	SX_OB_20220525_14_28_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	<0.01	31.2			
RPD																	0					
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS																<0.01					
E06.02	SX_OB_20220525_14_31_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																						
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS																<0.01					
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF																<0.05					
RPD																	0					
E06.02	SX_OB_20220525_14_26_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	<0.01	30.3			
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS																<0.01					
RPD																	0					
E06.02	SX_OB_20220525_14_26_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	<0.01	30.3			
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF																<0.05					
RPD																	0					
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																<0.01					
F03.01	SX_IB_20220525_14_55_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	<0.01	29.0			
RPD																	0					
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																<0.01					
F03.01	SX_IB_20220525_14_58_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																						
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS																<0.01					
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																<0.05					
RPD																	0					
F03.01	SX_IB_20220525_14_52_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	<0.01	22.2			
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS																<0.01					
RPD																	0					
F03.01	SX_IB_20220525_14_52_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	<0.01	22.2			
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF																<0.05					
RPD																	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 r
 ***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																						
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.3	180	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.2	290	33	<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				12	47	3	0	0	0	0	0	0	0	0	0	0	0
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.3	180	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS					<0.1	1.3	5.0	7.6	5.0	140		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
RPD						0					25		0	0	0		0			0		0	
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF							5.0		4.9													
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF							5.2		4.9													
RPD								4		0													
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF							6.9		6.3													
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF							7.3		6.3													
RPD								6		0													
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF							6.9		6.3													
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS							9.1															
RPD								27															
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.3	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.7	<100	36	<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				8	0	3	0	0	0	0	0	0	0	0	0	0	0
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.3	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS					<0.1	1.4	5.0	7.2	5.0	140		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
RPD						0					33		0	0	0		0			0		0	
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF							5.2		4.9													
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF							5.7		4.9													
RPD								9		0													
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF							7.7		6.3													
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF							7.3		6.3													
RPD								5		0													
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF							7.7		6.3													
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS							9.2															
RPD								18															
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.1	1.4	5.1	8.0	5.0	150		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS					<0.1	1.5	5.1	8.3	5.0	130		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
RPD						0	7	0	4	0	14		0	0	0		0			0		0	
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.1	1.4	5.1	8.0	5.0	150		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.5	200	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD						0					29		0	0			0			0		0	
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.1	1.4	5.1	8.0	5.0	150		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF							5.0		4.9													
RPD								2		2													
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS							7.0															
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS							9.4															
RPD								29															
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS							7.0															
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF							7.5		6.3													
RPD								7															
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.9	180	27	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.9	110	25	<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				14	48	8	0	0	0	0	0	0	0	0	0	0	0
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.9	180	27	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS					<0.1	1.6	5.2	9.8	5.0	240		<5	<0.50	<0.50		<0.50			<0.50		<0.50	
RPD						0					29		0	0	0		0			0		0	
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF							5.2		4.9													
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF							5.2		4.9													
RPD								0		0													
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF							9.2		5.9													
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF							9.3		5.9													
RPD								1		0													
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF							9.2		5.9													
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							10.2															
RPD								10															
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.5	270	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				7.9	110	32	<5	<0.5	<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	-	-	-	19	84	0	0	0	0	0	0	0	0	0	0	0	0
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.5	270	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS					<0.1	1.6	5.1	9.0	5.0	160		<5	<0.50	<0.50		<0.50			<0.50			
RPD						0					51		0	0	0		0			0			0
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF							5.1		4.9													
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF							5.1		4.9													
RPD								0		0													
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF							8.7		5.9													
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF							8.6		5.9													
RPD								1		0													
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF							8.7		5.9													
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS							9.4															
RPD								8															
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.1	1.6	5.2	9.5	5.0	160		<5	<0.50	<0.50		<0.50			<0.50			<0.50
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS					<0.1	1.6	5.2	9.4	5.0	130		<5	<0.50	<0.50		<0.50			<0.50			<0.50
RPD						0	0	0	1	0	21		0	0	0		0			0			0
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.1	1.6	5.2	9.5	5.0	160		<5	<0.50	<0.50		<0.50			<0.50			<0.50
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.5	200	34	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD						0					22		0	0		0				0			0
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.1	1.6	5.2	9.5	5.0	160		<5	<0.50	<0.50		<0.50			<0.50			<0.50
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF							5.1		4.9													
RPD								2		2													
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS							10.0															
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS							9.6															
RPD								4															
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS							10.0															
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF							8.6		5.9													
RPD								15															
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS							9.5															
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS					<0.1	1.6	5.2	8.8	5.0	210		<5	<0.50	<0.50		<0.50			<0.50			<0.50
RPD								59															
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS							9.5															
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				8.6	160	32	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD																							
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS							9.5															
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF							5.1		4.9													
RPD								60															
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS					<0.1	1.6	5.2	9.0	5.0	210		<5	<0.50	<0.50		<0.50			<0.50			<0.50
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS							9.6															
RPD								59															
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS					<0.1	1.6	5.2	9.0	5.0	210		<5	<0.50	<0.50		<0.50			<0.50			<0.50
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF							8.7		5.9													
RPD								50		17													
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							10.2															
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS					<0.1	1.6	5.2	9.9	5.0	290		<5	<0.50	<0.50		<0.50			<0.50			<0.50
RPD								65															
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							10.2															
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1	<0.1				6.6	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD																							
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS							10.2															
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF							5.2		4.9													
RPD								65															
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS					<0.1	1.6	5.2	9.8	5.0	210		<5	<0.50	<0.50		<0.50			<0.50			<0.50
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS							10.2															
RPD								65															
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS					<0.1	1.6	5.2	9.8	5.0	210		<5	<0.50	<0.50		<0.50			<0.50			<0.50
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF							9.3		5.9													
RPD								57		17													

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

	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	Alyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1

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	Alyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
F04.01	SX_OB_20220516_16_20_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	
F04.01	SX_OB_20220516_16_22_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	
F04.01	SX_OB_20220516_16_20_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	
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS					<0.5		<0.5								8.0
RPD								0								
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF															
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF															
RPD																
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF															
F04.01	SX_OB_20220516_16_22_SS_Duplicate_EUF															
RPD																
F04.01	SX_OB_20220516_16_20_SS_Primary_EUF															
F04.01	SX_OB_20220516_17_40_SS_Triplicate_ALS															
RPD																
F04.01	SX_OB_20220516_20_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	
F04.01	SX_OB_20220516_20_10_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	
F04.01	SX_OB_20220516_20_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	
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS					<0.5		<0.5								8.0
RPD								0								
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF															
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF															
RPD																
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF															
F04.01	SX_OB_20220516_20_10_SS_Duplicate_EUF															
RPD																
F04.01	SX_OB_20220516_20_08_SS_Primary_EUF															
F04.01	SX_OB_20220516_20_10_SS_Triplicate_ALS															
RPD																
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.5		<0.5								7.9
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS					<0.5		<0.5								7.9
RPD						0		0								0
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.5		<0.5								7.9
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0								
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS					<0.5		<0.5								7.9
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF															
RPD																
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS															
F02.01	SX_IB_20220516_08_06_SS_Duplicate_ALS															
RPD																
F02.01	SX_IB_20220516_08_05_SS_Primary_ALS															
F02.01	SX_IB_20220516_08_07_SS_Triplicate_EUF															
RPD																
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_46_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	
F03.01	SX_IB_20220525_14_42_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	
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS					<0.5		<0.5								8.0
RPD								0								
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF															
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF															
RPD																
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF															
F03.01	SX_IB_20220525_14_46_SS_Duplicate_EUF															
RPD																
F03.01	SX_IB_20220525_14_42_SS_Primary_EUF															
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS															
RPD																
E06.02	SX_OB_20220525_14_17_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	
E06.02	SX_OB_20220525_14_19_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	
E06.02	SX_OB_20220525_14_17_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	
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS					<0.5	<0.5									7.8
RPD							0									
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF															
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF															
RPD																
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF															
E06.02	SX_OB_20220525_14_19_SS_Duplicate_EUF															
RPD																
E06.02	SX_OB_20220525_14_17_SS_Primary_EUF															
E06.02	SX_OB_20220525_14_22_SS_Triplicate_ALS															
RPD																
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.5	<0.5									7.9
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS					<0.5	<0.5									7.6
RPD						0	0									4
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.5	<0.5									7.9
B02.03	SX_OB_20220525_14_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									
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS					<0.5	<0.5									7.9
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF															
RPD																
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS															
B02.03	SX_OB_20220525_14_04_SS_Duplicate_ALS															
RPD																
B02.03	SX_OB_20220525_14_02_SS_Primary_ALS															
B02.03	SX_OB_20220525_14_06_SS_Triplicate_EUF															
RPD																
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS															
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS					<0.5	<0.5									7.8
RPD																
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS															
E06.02	SX_OB_20220525_14_31_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																
E06.02	SX_OB_20220525_14_24_SS_Primary_ALS															
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF															
RPD																
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS					<0.5	<0.5									8.0
E06.02	SX_OB_20220525_14_28_SS_Duplicate_ALS															
RPD																
E06.02	SX_OB_20220525_14_26_SS_Primary_ALS					<0.5	<0.5									8.0
E06.02	SX_OB_20220525_14_31_SS_Triplicate_EUF															
RPD																
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS															
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS					<0.5	<0.5									8.2
RPD																
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS															
F03.01	SX_IB_20220525_14_58_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																
F03.01	SX_IB_20220525_14_49_SS_Triplicate_ALS															
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF															
RPD																
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS					<0.5	<0.5									8.1
F03.01	SX_IB_20220525_14_55_SS_Duplicate_ALS															
RPD																
F03.01	SX_IB_20220525_14_52_SS_Primary_ALS					<0.5	<0.5									8.1
F03.01	SX_IB_20220525_14_58_SS_Triplicate_EUF															
RPD																

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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

ATTACHMENT B: 95% UCL AVE CALCULATIONS

UCL Statistics for Uncensored Full Data Sets

User Selected Options
 Date/Time of Computation ProUCL 5.12/06/2022 3:49:54 PM
 From File WorkSheet.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Arsenic

General Statistics

Total Number of Observations	16	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	23	Mean	36.81
Maximum	61	Median	35.5
SD	9.833	Std. Error of Mean	2.458
Coefficient of Variation	0.267	Skewness	0.89

Normal GOF Test

Shapiro Wilk Test Statistic	0.939	Shapiro Wilk GOF Test
5% Shapiro Wilk Critical Value	0.887	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.131	Lilliefors GOF Test
5% Lilliefors Critical Value	0.213	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	41.12	95% Adjusted-CLT UCL (Chen-1995)	41.44
		95% Modified-t UCL (Johnson-1978)	41.21

Gamma GOF Test

A-D Test Statistic	0.253	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.738	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.135	Kolmogorov-Smirnov Gamma GOF Test
5% K-S Critical Value	0.215	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	15.96	k star (bias corrected MLE)	13.01
Theta hat (MLE)	2.306	Theta star (bias corrected MLE)	2.829
nu hat (MLE)	510.9	nu star (bias corrected)	416.4
MLE Mean (bias corrected)	36.81	MLE Sd (bias corrected)	10.2
		Approximate Chi Square Value (0.05)	370.1
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	365.1

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	41.42	95% Adjusted Gamma UCL (use when n<50)	41.98
--	-------	--	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.975	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.887	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.124	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.213	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	3.135	Mean of logged Data	3.574
Maximum of Logged Data	4.111	SD of logged Data	0.257

Assuming Lognormal Distribution

95% H-UCL	41.66	90% Chebyshev (MVUE) UCL	43.96
95% Chebyshev (MVUE) UCL	47.2	97.5% Chebyshev (MVUE) UCL	51.71
99% Chebyshev (MVUE) UCL	60.56		

Nonparametric Distribution Free UCL Statistics

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

Nonparametric Distribution Free UCLs

95% CLT UCL	40.86	95% Jackknife UCL	41.12
95% Standard Bootstrap UCL	40.77	95% Bootstrap-t UCL	42.02
95% Hall's Bootstrap UCL	42.29	95% Percentile Bootstrap UCL	41
95% BCA Bootstrap UCL	41.5		
90% Chebyshev(Mean, Sd) UCL	44.19	95% Chebyshev(Mean, Sd) UCL	47.53
97.5% Chebyshev(Mean, Sd) UCL	52.16	99% Chebyshev(Mean, Sd) UCL	61.27

Suggested UCL to Use

95% Student's-t UCL	41.12
---------------------	-------

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	16	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	148	Mean	185
Maximum	280	Median	180
SD	36.35	Std. Error of Mean	9.087
Coefficient of Variation	0.196	Skewness	1.372

Normal GOF Test

Shapiro Wilk Test Statistic	0.864
5% Shapiro Wilk Critical Value	0.887
Lilliefors Test Statistic	0.183
5% Lilliefors Critical Value	0.213

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	200.9
---------------------	-------

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995)	203.3
95% Modified-t UCL (Johnson-1978)	201.4

Gamma GOF Test

A-D Test Statistic	0.602
5% A-D Critical Value	0.736
K-S Test Statistic	0.194
5% K-S Critical Value	0.215

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)	30.98	k star (bias corrected MLE)	25.21
Theta hat (MLE)	5.972	Theta star (bias corrected MLE)	7.338
nu hat (MLE)	991.3	nu star (bias corrected)	806.7
MLE Mean (bias corrected)	185	MLE Sd (bias corrected)	36.84
		Approximate Chi Square Value (0.05)	741.8
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	734.8

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when $n \geq 50$)	201.2	95% Adjusted Gamma UCL (use when $n < 50$)	203.1
---	-------	---	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.907	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.887	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.188	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.213	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	4.997	Mean of logged Data	5.204
Maximum of Logged Data	5.635	SD of logged Data	0.181

Assuming Lognormal Distribution

95% H-UCL	201.2	90% Chebyshev (MVUE) UCL	210.1
95% Chebyshev (MVUE) UCL	221.6	97.5% Chebyshev (MVUE) UCL	237.4
99% Chebyshev (MVUE) UCL	268.6		

Nonparametric Distribution Free UCL Statistics

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

Nonparametric Distribution Free UCLs

95% CLT UCL	199.9	95% Jackknife UCL	200.9
95% Standard Bootstrap UCL	199.3	95% Bootstrap-t UCL	208.1
95% Hall's Bootstrap UCL	211.1	95% Percentile Bootstrap UCL	200.2
95% BCA Bootstrap UCL	201.8		
90% Chebyshev(Mean, Sd) UCL	212.3	95% Chebyshev(Mean, Sd) UCL	224.6
97.5% Chebyshev(Mean, Sd) UCL	241.7	99% Chebyshev(Mean, Sd) UCL	275.4

Suggested UCL to Use

95% Student's-t UCL	200.9
---------------------	-------

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:	F03.0120220602153641_01	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

ATTACHMENT C: LABORATORY CERTIFICATES



CHAIN OF CUSTODY RECORD

LabSafe | Environmental Testing Australia Pty Ltd

Sydney Laboratory
Unit F3 Bld F 18 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
Unit 1 21 Smallwood Place Muramba QLD 4172
07 3002 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory
Unit 2 91 Leach Highway Kewdale WA 6105
08 9261 9600 EnviroSampleWA@eurofins.com

Melbourne Laboratory
8 Monastery Road Dandenong South VIC 3175
03 8594 5000 EnviroSampleVIC@eurofins.com

Company		Project No		Project Manager		Sampler(s)			
AGON Environmental - Tunnel Spoil Testing		JC0927		Craig Trimbur		Brandon and Toby - Agon			
Address		Project Name		EDD Format		Handed over by			
Unit H76, 63-85 Turner St, Port Melbourne VIC 3207		WGTP-Tunnel Ref: 20220517043542		ESat: PCLF 500		Esdat			
Contact Name		Analyses <small>When listing an analyte please specify the matrix and any sub-analyte with units (if applicable)</small>		Containers		Required Turnaround Time (TAT)			
Craig Trimbur David Lawson				500ml. Plastic		Default will be 5 days if not stated		<input type="checkbox"/> Overnight (reporting by 9am) <input type="checkbox"/> Same day <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days <input type="checkbox"/> Other	
Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.				250ml. Plastic		*Surcharge will apply			
Please provide eSRN along with other sample receipt documentation.				125ml. Plastic					
Phone No		Suite		200ml. Amber Glass		Jar (Glass or HDPE)			
+61 490 826 907 (Craig) +61 490 411 004 (David)		WGTP-AI - TRM/PAH/Phenols/OCF/PCB/VOC/Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/Cr6+ CN/ Total Fluoride pH		40ml. VOA vial		Other (Indicate AS 8084, WA Guidelines)			
Special Directions		PFAS Extended Sub - 0.1 - 5ug/kg		500ml. PFAS Bottle					
Purchase Order		ASLP PH 5 - PFAS 0.01-0.05 ug/l		Jar (Glass or HDPE)					
Quote ID No		ASLP Reagent - PFAS 0.01-0.05ug/l		500ml. PFAS Bottle					
Agon WGTP TST									
No	Client Sample ID	Sampled Date/Time	Matrix	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	Sample Comments / Dangerous Goods Hazard Warning	
1	SX_IB_20220516_06_07_SS_Triplicate_EUF	16/05/2022 08:07	S	X	X	X	X		
2	SX_IB_20220516_08_11_SS_Primary_EUF	16/05/2022 08:11	S	X	X	X	X		
3	SX_IB_20220516_12_15_SS_Primary_EUF	16/05/2022 12:15	S	X	X	X	X		
4	SX_IB_20220516_12_20_SS_Primary_EUF	16/05/2022 12:20	S	X	X	X	X		
5	SX_OB_20220516_16_20_SS_Primary_EUF	16/05/2022 16:20:00 PM	S	X	X	X	X		
6	SX_OB_20220516_16_22_SS_Duplicate_EUF	16/05/2022 16:21	S	X	X	X	X		
7	SX_OB_20220516_16_55_SR_Rinsate_EUF	16/05/2022 16:55	W		X				
8	SX_OB_20220516_16_57_SB_Blank_EUF	16/05/2022 16:57	W		X				
9	SX_OB_20220516_20_00_SS_Primary_EUF	16/05/2022 20:00:00 PM	S	X	X	X	X		
10	SX_OB_20220516_20_10_SS_Duplicate_EUF	16/05/2022 20:10:00 PM	S	X	X	X	X		
11	SX_OB_20220516_20_08_SS_Primary_EUF	16/05/2022 20:08:00 PM	S	X	X	X	X		
12	SX_OB_20220517_00_05_SS_Primary_EUF	17/05/2022 00:05	S	X	X	X	X		
13	SX_OB_20220517_03_57_SS_Primary_EUF	17/05/2022 03:57	S	X	X	X	X		
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
Total Counts				11	11	11	11		

Method of Shipment: Courier (U) Hand Delivered Postal

Name: Hannah Signature: [Signature] Date: 17/5/22 Time: 16:30

Received By: [Signature] Date: 17/5/22 Time: 16:30

Received By: [Signature] Date: [] Time: []

Environmental Testing Australia Pty Ltd

889101
17/5/22
TJ

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 **889101-L-V2**
Project name **20220517043542-Eurofin-12**
Project ID **JC0927**
Received Date **May 17, 2022**

Client Sample ID			SX_IB_202205 16_08_07_SS Triplicate_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_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- My0038919	M22- My0038920	M22- My0038921	M22- My0038922
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.0	5.0	5.0	5.0
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	79	82	77	82
13C5-PFPeA (surr.)	1	%	83	92	62	69
13C5-PFHxA (surr.)	1	%	77	89	55	74
13C4-PFHpA (surr.)	1	%	71	73	87	88
13C8-PFOA (surr.)	1	%	75	108	99	103
13C5-PFNA (surr.)	1	%	78	95	89	105
13C6-PFDA (surr.)	1	%	71	88	94	106
13C2-PFUnDA (surr.)	1	%	55	86	66	95
13C2-PFDoDA (surr.)	1	%	50	85	79	89
13C2-PFTeDA (surr.)	1	%	44	90	113	100
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			SX_IB_202205 16_08_07_SS TriPLICATE_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_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- My0038919	M22- My0038920	M22- My0038921	M22- My0038922
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	29	72	72	79
D3-N-MeFOSA (surr.)	1	%	11	45	14	44
D5-N-EtFOSA (surr.)	1	%	44	59	10	58
D7-N-MeFOSE (surr.)	1	%	15	60	41	74
D9-N-EtFOSE (surr.)	1	%	13	53	49	56
D5-N-EtFOSAA (surr.)	1	%	54	64	53	67
D3-N-MeFOSAA (surr.)	1	%	56	62	57	67
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	87	86	44	95
18O2-PFHxS (surr.)	1	%	83	100	75	113
13C8-PFOS (surr.)	1	%	77	102	83	109
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	66	117	97	134
13C2-6:2 FTSA (surr.)	1	%	57	147	76	121
13C2-8:2 FTSA (surr.)	1	%	68	83	61	71
13C2-10:2 FTSA (surr.)	1	%	64	84	76	95
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
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- My0038923	M22- My0038924	M22- My0038925	M22- My0038926
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.0	5.2	5.2	5.7
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	79	76	84	80
13C5-PFPeA (surr.)	1	%	103	91	93	111
13C5-PFHxA (surr.)	1	%	85	86	74	91
13C4-PFHpA (surr.)	1	%	93	89	92	95
13C8-PFOA (surr.)	1	%	97	99	107	109
13C5-PFNA (surr.)	1	%	88	85	104	93
13C6-PFDA (surr.)	1	%	81	76	95	98
13C2-PFUnDA (surr.)	1	%	74	67	88	70
13C2-PFDoDA (surr.)	1	%	75	65	85	71
13C2-PFTTeDA (surr.)	1	%	89	64	97	76
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	67	55	77	64
D3-N-MeFOSA (surr.)	1	%	53	28	56	39
D5-N-EtFOSA (surr.)	1	%	83	47	79	52
D7-N-MeFOSE (surr.)	1	%	51	43	65	46
D9-N-EtFOSE (surr.)	1	%	47	39	56	41
D5-N-EtFOSAA (surr.)	1	%	64	60	69	63
D3-N-MeFOSAA (surr.)	1	%	59	56	69	59

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
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- My0038923	M22- My0038924	M22- My0038925	M22- My0038926
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	95	85	93	99
18O2-PFHxS (surr.)	1	%	99	92	105	108
13C8-PFOS (surr.)	1	%	92	85	106	96
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	72	86	114	77
13C2-6:2 FTSA (surr.)	1	%	115	122	117	89
13C2-8:2 FTSA (surr.)	1	%	78	65	73	81
13C2-10:2 FTSA (surr.)	1	%	81	72	111	73
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF	SX_IB_202205 16_08_07_SS _Triplicate_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0038927	M22- My0038928	M22- My0038929	M22- My0038930
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022	May 16, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	4.9	6.3
pH (off)	0.1	pH Units	5.2	5.2	5.2	7.5

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF	SX_IB_202205 16_08_07_SS _Triplicate_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0038927	M22- My0038928	M22- My0038929	M22- My0038930
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	75	78	74	73
13C5-PFPeA (surr.)	1	%	83	83	83	86
13C5-PFHxA (surr.)	1	%	83	54	85	78
13C4-PFHpA (surr.)	1	%	85	89	71	72
13C8-PFOA (surr.)	1	%	95	95	99	97
13C5-PFNA (surr.)	1	%	83	83	87	86
13C6-PFDA (surr.)	1	%	81	73	80	76
13C2-PFUnDA (surr.)	1	%	64	65	70	77
13C2-PFDoDA (surr.)	1	%	55	76	67	63
13C2-PFTTeDA (surr.)	1	%	63	168	61	53
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	53	53	62	77
D3-N-MeFOSA (surr.)	1	%	33	51	31	45
D5-N-EtFOSA (surr.)	1	%	46	18	41	55
D7-N-MeFOSE (surr.)	1	%	40	17	41	48
D9-N-EtFOSE (surr.)	1	%	34	25	36	39
D5-N-EtFOSAA (surr.)	1	%	56	51	65	64
D3-N-MeFOSAA (surr.)	1	%	57	61	60	60
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF	SX_IB_202205 16_08_07_SS _TriPLICATE_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0038927	M22- My0038928	M22- My0038929	M22- My0038930
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	86	56	80	76
18O2-PFHxS (surr.)	1	%	88	94	97	93
13C8-PFOS (surr.)	1	%	79	88	84	87
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	89	80	92	95
13C2-6:2 FTSA (surr.)	1	%	111	69	144	132
13C2-8:2 FTSA (surr.)	1	%	67	76	70	70
13C2-10:2 FTSA (surr.)	1	%	66	68	72	71
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 16_08_11_SS _Primary_EUF	SX_IB_202205 16_12_15_SS _Primary_EUF	SX_IB_202205 16_12_20_SS _Primary_EUF	SX_OB_20220 516_16_20_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- My0038931	M22- My0038932	M22- My0038933	M22- My0038934
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.3	6.3	6.3	6.3
pH (off)	0.1	pH Units	7.9	7.8	7.9	6.9
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_IB_202205 16_08_11_SS_ Primary_EUF	SX_IB_202205 16_12_15_SS_ Primary_EUF	SX_IB_202205 16_12_20_SS_ Primary_EUF	SX_IB_202205 16_12_20_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- My0038931	M22- My0038932	M22- My0038933	M22- My0038934
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	87	80	82	83
13C5-PFPeA (surr.)	1	%	101	95	87	115
13C5-PFHxA (surr.)	1	%	94	63	62	93
13C4-PFHpA (surr.)	1	%	97	70	77	95
13C8-PFOA (surr.)	1	%	109	97	107	107
13C5-PFNA (surr.)	1	%	102	100	111	102
13C6-PFDA (surr.)	1	%	104	112	104	99
13C2-PFUnDA (surr.)	1	%	94	87	92	85
13C2-PFDoDA (surr.)	1	%	84	78	75	79
13C2-PFTeDA (surr.)	1	%	80	89	90	91
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	89	91	90	83
D3-N-MeFOSA (surr.)	1	%	36	87	63	56
D5-N-EtFOSA (surr.)	1	%	45	111	91	72
D7-N-MeFOSE (surr.)	1	%	49	63	58	48
D9-N-EtFOSE (surr.)	1	%	43	45	49	42
D5-N-EtFOSAA (surr.)	1	%	76	73	66	69
D3-N-MeFOSAA (surr.)	1	%	81	67	74	73
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	97	87	93	99
18O2-PFHxS (surr.)	1	%	107	106	106	119
13C8-PFOS (surr.)	1	%	110	102	107	105

Client Sample ID			SX_IB_20220516_08_11_SS_Primary_EUF	SX_IB_20220516_12_15_SS_Primary_EUF	SX_IB_20220516_12_20_SS_Primary_EUF	SX_OB_20220516_16_20_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-My0038931	M22-My0038932	M22-My0038933	M22-My0038934
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	126	118	125	77
13C2-6:2 FTSA (surr.)	1	%	122	101	103	118
13C2-8:2 FTSA (surr.)	1	%	105	68	71	101
13C2-10:2 FTSA (surr.)	1	%	108	80	90	76
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220516_16_22_SS_Duplicate_EUF	SX_IB_20220516_20_00_SS_Primary_EUF	SX_OB_20220516_20_10_SS_Duplicate_EUF	SX_OB_20220516_20_08_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-My0038935	M22-My0038936	M22-My0038937	M22-My0038938
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.3	6.3	6.3	6.3
pH (off)	0.1	pH Units	7.3	7.3	7.3	7.7
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	85	80	71	85

Client Sample ID			SX_OB_20220 516_16_22_SS Duplicate_EU F	SX_IB_202205 16_20_00_SS Primary_EUF	SX_OB_20220 516_20_10_SS Duplicate_EU F	SX_OB_20220 516_20_08_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- My0038935	M22- My0038936	M22- My0038937	M22- My0038938
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	86	77	72	95
13C5-PFHxA (surr.)	1	%	90	53	96	111
13C4-PFHpA (surr.)	1	%	76	83	79	96
13C8-PFOA (surr.)	1	%	90	89	66	89
13C5-PFNA (surr.)	1	%	85	86	82	99
13C6-PFDA (surr.)	1	%	89	84	103	104
13C2-PFUnDA (surr.)	1	%	67	67	97	116
13C2-PFDoDA (surr.)	1	%	61	83	88	110
13C2-PFTeDA (surr.)	1	%	73	155	40	53
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	50	86	83	86
D3-N-MeFOSA (surr.)	1	%	52	16	57	64
D5-N-EtFOSA (surr.)	1	%	97	17	58	85
D7-N-MeFOSE (surr.)	1	%	15	35	31	58
D9-N-EtFOSE (surr.)	1	%	24	47	43	67
D5-N-EtFOSAA (surr.)	1	%	47	68	77	89
D3-N-MeFOSAA (surr.)	1	%	71	75	88	91
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	94	53	84	107
18O2-PFHxS (surr.)	1	%	73	99	69	94
13C8-PFOS (surr.)	1	%	92	89	65	91

Client Sample ID			SX_OB_20220516_16_22_SS_Duplicate_EUF	SX_IB_20220516_20_00_SS_Primary_EUF	SX_OB_20220516_20_10_SS_Duplicate_EUF	SX_OB_20220516_20_08_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-My0038935	M22-My0038936	M22-My0038937	M22-My0038938
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	63	87	60	77
13C2-6:2 FTSA (surr.)	1	%	69	71	53	73
13C2-8:2 FTSA (surr.)	1	%	71	75	49	69
13C2-10:2 FTSA (surr.)	1	%	73	60	65	102
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_20220517_00_05_SS_Primary_EUF	SX_IB_20220517_03_57_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-My0038939	M22-My0038940
Date Sampled			May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit		
AUS Leaching Procedure				
Leachate Fluid ^{C01}		comment	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.3	6.3
pH (off)	0.1	pH Units	7.7	7.8
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	88	81

Client Sample ID			SX_IB_202205 17_00_05_SS Primary_EUF	SX_IB_202205 17_03_57_SS Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0038939	M22- My0038940
Date Sampled			May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
13C5-PFPeA (surr.)	1	%	81	98
13C5-PFHxA (surr.)	1	%	62	89
13C4-PFHpA (surr.)	1	%	100	75
13C8-PFOA (surr.)	1	%	115	110
13C5-PFNA (surr.)	1	%	100	97
13C6-PFDA (surr.)	1	%	110	84
13C2-PFUnDA (surr.)	1	%	74	86
13C2-PFDoDA (surr.)	1	%	85	76
13C2-PFTeDA (surr.)	1	%	126	78
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	81	81
D3-N-MeFOSA (surr.)	1	%	42	54
D5-N-EtFOSA (surr.)	1	%	17	70
D7-N-MeFOSE (surr.)	1	%	24	48
D9-N-EtFOSE (surr.)	1	%	37	45
D5-N-EtFOSAA (surr.)	1	%	63	73
D3-N-MeFOSAA (surr.)	1	%	64	71
Perfluoroalkyl sulfonic acids (PFSA)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	59	87
18O2-PFHxS (surr.)	1	%	111	96
13C8-PFOS (surr.)	1	%	100	99

Client Sample ID			SX_IB_202205 17_00_05_SS_	SX_IB_202205 17_03_57_SS_
Sample Matrix			Primary_EUF	Primary_EUF
Eurofins Sample No.			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Date Sampled			M22- My0038939	M22- My0038940
Test/Reference	LOR	Unit	May 17, 2022	May 17, 2022
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	98	105
13C2-6:2 FTSA (surr.)	1	%	93	149
13C2-8:2 FTSA (surr.)	1	%	76	91
13C2-10:2 FTSA (surr.)	1	%	91	80
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
AUS Leaching Procedure			
pH (initial) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 17, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 17, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 17, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	Soil	M22-My0038906		X	X	X
2	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	Soil	M22-My0038907		X	X	X
3	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	Soil	M22-My0038908		X	X	X
4	SX_IB_20220516_12_20_SS	May 16, 2022	12:20PM	Soil	M22-My0038909		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Primary_EUF								
5	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:20PM	Soil	M22-My0038910		X	X	X
6	SX_OB_20220516_16_22_S_S_Duplicate_EUF	May 16, 2022	4:21PM	Soil	M22-My0038911		X	X	X
7	SX_OB_20220516_16_55_S_R_Rinsate_EUF	May 16, 2022	4:55PM	Water	M22-My0038912			X	
8	SX_OB_20220	May 16, 2022	4:57PM	Water	M22-			X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
8	SX_OB_20220516_16_57_S B_Blank_EUF	May 16, 2022	4:57PM	Water	M22-My0038913				
9	SX_IB_20220516_20_00_SS_Primary_EUF	May 16, 2022	8:00PM	Soil	M22-My0038914		X	X	X
10	SX_OB_20220516_20_10_S_S_Duplicate_EUF	May 16, 2022	8:10PM	Soil	M22-My0038915		X	X	X
11	SX_OB_20220516_20_08_S_S_Primary_EUF	May 16, 2022	8:08PM	Soil	M22-My0038916		X	X	X

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
12	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	Soil	M22-My0038917		X	X	X
13	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	Soil	M22-My0038918		X	X	X
14	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	AUS Leachate - pH 5.0	M22-My0038919	X		X	
15	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0038920	X		X	
16	SX_IB_202205	May 16, 2022	12:15PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
16	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - pH 5.0	M22-My0038921				
17	SX_IB_20220516_12_20_SS_Primary_EUF	May 16, 2022	12:20PM	AUS Leachate - pH 5.0	M22-My0038922	X		X	
18	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:20PM	AUS Leachate - pH 5.0	M22-My0038923	X		X	
19	SX_OB_20220516_16_22_S_S_Duplicate_EUF	May 16, 2022	4:21PM	AUS Leachate - pH 5.0	M22-My0038924	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
20	SX_IB_20220516_20_00_SS_Primary_EUF	May 16, 2022	8:00PM	AUS Leachate - pH 5.0	M22-My0038925	X		X	
21	SX_OB_20220516_20_10_SS_Duplicate_EUF	May 16, 2022	8:10PM	AUS Leachate - pH 5.0	M22-My0038926	X		X	
22	SX_OB_20220516_20_08_SS_Primary_EUF	May 16, 2022	8:08PM	AUS Leachate - pH 5.0	M22-My0038927	X		X	
23	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	AUS Leachate - pH 5.0	M22-My0038928	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
24	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	AUS Leachate - pH 5.0	M22-My0038929	X		X	
25	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	AUS Leachate - Reagent Water	M22-My0038930	X		X	
26	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	AUS Leachate - Reagent Water	M22-My0038931	X		X	
27	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - Reagent Water	M22-My0038932	X		X	
28	SX_IB_202205	May 16, 2022	12:20PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	16_12_20_SS _Primary_EUF			- Reagent Water	My0038933				
29	SX_OB_20220 516_16_20_S S_Primary_EU F	May 16, 2022	4:20PM	AUS Leachate - Reagent Water	M22- My0038934	X		X	
30	SX_OB_20220 516_16_22_S S_Duplicate_E UF	May 16, 2022	4:21PM	AUS Leachate - Reagent Water	M22- My0038935	X		X	
31	SX_IB_202205 16_20_00_SS _Primary_EUF	May 16, 2022	8:00PM	AUS Leachate - Reagent Water	M22- My0038936	X		X	
32	SX_OB_20220	May 16, 2022	8:10PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
32	SX_OB_20220516_20_10_SS_Duplicate_EUF	May 16, 2022	8:10PM	AUS Leachate - Reagent Water	M22-My0038937				
33	SX_OB_20220516_20_08_SS_Primary_EUF	May 16, 2022	8:08PM	AUS Leachate - Reagent Water	M22-My0038938	X		X	
34	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	AUS Leachate - Reagent Water	M22-My0038939	X		X	
35	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	AUS Leachate - Reagent Water	M22-My0038940	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IMRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217				
Brisbane Laboratory - NATA # 1261 Site # 20794				
Mayfield Laboratory - NATA # 1261 Site # 25079				
Perth Laboratory - NATA # 2377 Site # 2370				
External Laboratory				
Test Counts	22	11	35	11

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05		0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	133		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	148		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	110		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	137		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	143		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	140		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	119		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	139		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	121		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	114		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	143		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code		
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)	%	100			50-150	Pass			
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	102			50-150	Pass			
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	82			50-150	Pass			
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	84			50-150	Pass			
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	125			50-150	Pass			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	137			50-150	Pass			
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	119			50-150	Pass			
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA)									
Perfluorobutanesulfonic acid (PFBS)	%	98			50-150	Pass			
Perfluorononanesulfonic acid (PFNS)	%	102			50-150	Pass			
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass			
Perfluoropentanesulfonic acid (PFPeS)	%	146			50-150	Pass			
Perfluorohexanesulfonic acid (PFHxS)	%	122			50-150	Pass			
Perfluoroheptanesulfonic acid (PFHpS)	%	95			50-150	Pass			
Perfluorooctanesulfonic acid (PFOS)	%	112			50-150	Pass			
Perfluorodecanesulfonic acid (PFDS)	%	89			50-150	Pass			
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	119			50-150	Pass			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	150			50-150	Pass			
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	140			50-150	Pass			
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	115			50-150	Pass			
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)									
				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances									
				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0038921	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-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0038921	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0038921	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0038922	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-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0038922	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0038922	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments

This report has been revised (V2) to correct sample names

SX_OB_20220516_20_00_SS_Primary_EUFto SX_IB_20220516_20_00_SS_Primary_EUF
 SX_OB_20220517_00_05_SS_Primary_EUFto SX_IB_20220517_00_05_SS_Primary_EUF
 SX_OB_20220517_03_57_SS_Primary_EUFto SX_IB_20220517_03_57_SS_Primary_EUF

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](#).

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

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 **889101-S-V2**
Project name **20220517043542-Eurofin-12**
Project ID **JC0927**
Received Date **May 17, 2022**

Client Sample ID			SX_IB_202205 16_08_07_SS TriPLICATE_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_IB_202205 16_08_07_SS Triplicate_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	72	77	65	64
Toluene-d8 (surr.)	1	%	70	66	55	82
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_IB_202205 16_08_07_SS TriPLICATE_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	66	73	55	68
p-Terphenyl-d14 (surr.)	1	%	87	146	104	52
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	53	85	141	112
Tetrachloro-m-xylene (surr.)	1	%	95	127	145	85

Client Sample ID			SX_IB_202205 16_08_07_SS TriPLICATE_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	53	85	141	112
Tetrachloro-m-xylene (surr.)	1	%	95	127	145	85
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	33	int	int	int
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Other Parameters						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	1.0
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	200	100	< 100	180
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.5	8.6	8.0	8.4
% Moisture	1	%	30	32	32	31
Heavy Metals						
Arsenic	2	mg/kg	59	45	48	43
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	170	130	190	170
Copper	5	mg/kg	93	72	92	72
Lead	5	mg/kg	6.4	5.5	6.4	5.9
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 16_08_07_SS TriPLICATE_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	220	210	280	240
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	160	130	180	160
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTeDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	79	77	74	77
13C5-PFPeA (surr.)	1	%	75	70	61	69
13C5-PFHxA (surr.)	1	%	78	76	68	68
13C4-PFHpA (surr.)	1	%	87	84	79	80
13C8-PFOA (surr.)	1	%	77	76	59	54
13C5-PFNA (surr.)	1	%	57	56	53	77
13C6-PFDA (surr.)	1	%	107	49	82	80
13C2-PFUnDA (surr.)	1	%	79	85	77	124
13C2-PFDoDA (surr.)	1	%	91	106	84	85
13C2-PFTeDA (surr.)	1	%	82	84	84	65
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	108	126	96	102
D3-N-MeFOSA (surr.)	1	%	68	82	84	88
D5-N-EtFOSA (surr.)	1	%	84	80	71	76
D7-N-MeFOSE (surr.)	1	%	72	58	60	57
D9-N-EtFOSE (surr.)	1	%	80	75	77	80
D5-N-EtFOSAA (surr.)	1	%	178	113	128	30
D3-N-MeFOSAA (surr.)	1	%	137	126	113	120

Client Sample ID			SX_IB_202205 16_08_07_SS Triuplicate_EUF	SX_IB_202205 16_08_11_SS Primary_EUF	SX_IB_202205 16_12_15_SS Primary_EUF	SX_IB_202205 16_12_20_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038906	M22- My0038907	M22- My0038908	M22- My0038909
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	81	77	73	70
18O2-PFHxS (surr.)	1	%	89	78	67	61
13C8-PFOS (surr.)	1	%	54	77	63	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	62	64	61	65
13C2-6:2 FTSA (surr.)	1	%	74	64	62	71
13C2-8:2 FTSA (surr.)	1	%	64	73	56	54
13C2-10:2 FTSA (surr.)	1	%	133	149	128	133
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS_ Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	143	142	78	84
Toluene-d8 (surr.)	1	%	142	126	85	84
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	81	58	112	124
p-Terphenyl-d14 (surr.)	1	%	110	75	141	136

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	54	90	121	112
Tetrachloro-m-xylene (surr.)	1	%	53	52	141	138
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	54	90	121	112
Tetrachloro-m-xylene (surr.)	1	%	53	52	141	138
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	int	35	48	44
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	180	290	160	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.3	8.2	7.4	7.7
% Moisture						
% Moisture	1	%	34	33	33	36
Heavy Metals						
Arsenic	2	mg/kg	22	34	46	27
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	140	120	110
Copper	5	mg/kg	69	86	67	87
Lead	5	mg/kg	< 5	5.0	< 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	170	290	190	220
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	120	170	150	150
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	73	73	84	88
13C5-PFPeA (surr.)	1	%	69	74	88	85
13C5-PFHxA (surr.)	1	%	79	76	80	85

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	76	84	85	92
13C8-PFOA (surr.)	1	%	74	89	55	91
13C5-PFNA (surr.)	1	%	69	67	64	80
13C6-PFDA (surr.)	1	%	87	62	67	78
13C2-PFUnDA (surr.)	1	%	68	81	80	86
13C2-PFDoDA (surr.)	1	%	87	89	97	112
13C2-PFTeDA (surr.)	1	%	83	85	87	101
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	91	103	105	106
D3-N-MeFOSA (surr.)	1	%	67	77	75	93
D5-N-EtFOSA (surr.)	1	%	67	79	96	104
D7-N-MeFOSE (surr.)	1	%	62	63	56	78
D9-N-EtFOSE (surr.)	1	%	66	73	97	101
D5-N-EtFOSAA (surr.)	1	%	65	123	59	117
D3-N-MeFOSAA (surr.)	1	%	129	108	151	129
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	75	73	71	79
18O2-PFHxS (surr.)	1	%	76	66	78	82
13C8-PFOS (surr.)	1	%	92	71	77	87
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	54	57	67	65
13C2-6:2 FTSA (surr.)	1	%	70	56	71	85

Client Sample ID			SX_OB_20220 516_16_20_SS _Primary_EUF	SX_OB_20220 516_16_22_SS _Duplicate_EU F	SX_IB_202205 16_20_00_SS _Primary_EUF	SX_OB_20220 516_20_10_SS _Duplicate_EU F
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0038910	M22- My0038911	M22- My0038914	M22- My0038915
Date Sampled			May 16, 2022	May 16, 2022	May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	58	55	85	114
13C2-10:2 FTSA (surr.)	1	%	71	84	113	87
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Volatile Organics					
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Volatile Organics					
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	77	78	54
Toluene-d8 (surr.)	1	%	82	83	53

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	86	88	86
p-Terphenyl-d14 (surr.)	1	%	93	92	92
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Organochlorine Pesticides					
Dibutylchlorendate (surr.)	1	%	72	76	70
Tetrachloro-m-xylene (surr.)	1	%	50	50	99
Polychlorinated Biphenyls					
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	72	76	70
Tetrachloro-m-xylene (surr.)	1	%	50	50	99
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	48	45	46
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Chromium (hexavalent)					
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	100	130
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.3	8.3	8.0
% Moisture	1	%	35	31	33

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Heavy Metals					
Arsenic	2	mg/kg	27	41	61
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	130
Copper	5	mg/kg	65	61	88
Lead	5	mg/kg	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5
Nickel	5	mg/kg	170	180	210
Selenium	2	mg/kg	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10
Zinc	5	mg/kg	110	130	200
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTeDA) ^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	81	88	84
13C5-PFPeA (surr.)	1	%	78	86	80
13C5-PFHxA (surr.)	1	%	75	79	82
13C4-PFHpA (surr.)	1	%	91	91	82
13C8-PFOA (surr.)	1	%	87	62	74
13C5-PFNA (surr.)	1	%	112	59	67
13C6-PFDA (surr.)	1	%	98	67	81
13C2-PFUnDA (surr.)	1	%	92	94	112
13C2-PFDoDA (surr.)	1	%	88	105	108
13C2-PFTeDA (surr.)	1	%	83	90	87
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	92	99	101
D3-N-MeFOSA (surr.)	1	%	78	102	66

Client Sample ID			SX_OB_20220 516_20_08_SS _Primary_EUF	SX_IB_202205 17_00_05_SS _Primary_EUF	SX_IB_202205 17_03_57_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M22- My0038916	M22- My0038917	M22- My0038918
Date Sampled			May 16, 2022	May 17, 2022	May 17, 2022
Test/Reference	LOR	Unit			
Perfluoroalkyl sulfonamido substances					
D5-N-EtFOSA (surr.)	1	%	82	109	96
D7-N-MeFOSE (surr.)	1	%	54	81	71
D9-N-EtFOSE (surr.)	1	%	88	110	105
D5-N-EtFOSAA (surr.)	1	%	93	119	62
D3-N-MeFOSAA (surr.)	1	%	79	21	94
Perfluoroalkyl sulfonic acids (PFASs)					
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	73	81	79
18O2-PFHxS (surr.)	1	%	82	78	81
13C8-PFOS (surr.)	1	%	138	83	114
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	61	69	67
13C2-6:2 FTSA (surr.)	1	%	69	78	72
13C2-8:2 FTSA (surr.)	1	%	136	77	110
13C2-10:2 FTSA (surr.)	1	%	93	137	68
PFASs Summations					
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 17, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 17, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	May 17, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	May 17, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	May 17, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 17, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	May 17, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	May 17, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 17, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	May 17, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection - Method: LTM-INO-4230 Hexavalent Chromium by UV-Vis	Melbourne	May 17, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	May 19, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC	Melbourne	May 18, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	May 17, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	May 17, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	May 17, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	May 17, 2022	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	Soil	M22-My0038906		X	X	X
2	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	Soil	M22-My0038907		X	X	X
3	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	Soil	M22-My0038908		X	X	X
4	SX_IB_20220516_12_20_SS	May 16, 2022	12:20PM	Soil	M22-My0038909		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Primary_EUF								
5	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:20PM	Soil	M22-My0038910		X	X	X
6	SX_OB_20220516_16_22_S_S_Duplicate_EUF	May 16, 2022	4:21PM	Soil	M22-My0038911		X	X	X
7	SX_OB_20220516_16_55_S_R_Rinsate_EUF	May 16, 2022	4:55PM	Water	M22-My0038912			X	
8	SX_OB_20220	May 16, 2022	4:57PM	Water	M22-			X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
8	SX_OB_20220516_16_57_S B_Blank_EUF	May 16, 2022	4:57PM	Water	M22-My0038913				
9	SX_IB_20220516_20_00_SS_Primary_EUF	May 16, 2022	8:00PM	Soil	M22-My0038914		X	X	X
10	SX_OB_20220516_20_10_S S_Duplicate_EUF	May 16, 2022	8:10PM	Soil	M22-My0038915		X	X	X
11	SX_OB_20220516_20_08_S S_Primary_EUF	May 16, 2022	8:08PM	Soil	M22-My0038916		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
12	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	Soil	M22-My0038917		X	X	X
13	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	Soil	M22-My0038918		X	X	X
14	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	AUS Leachate - pH 5.0	M22-My0038919	X		X	
15	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0038920	X		X	
16	SX_IB_202205	May 16, 2022	12:15PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
16	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - pH 5.0	M22-My0038921				
17	SX_IB_20220516_12_20_SS_Primary_EUF	May 16, 2022	12:20PM	AUS Leachate - pH 5.0	M22-My0038922	X		X	
18	SX_OB_20220516_16_20_SS_Primary_EUF	May 16, 2022	4:20PM	AUS Leachate - pH 5.0	M22-My0038923	X		X	
19	SX_OB_20220516_16_22_SS_Duplicate_EUF	May 16, 2022	4:21PM	AUS Leachate - pH 5.0	M22-My0038924	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
20	SX_IB_20220516_20_00_SS_Primary_EUF	May 16, 2022	8:00PM	AUS Leachate - pH 5.0	M22-My0038925	X		X	
21	SX_OB_20220516_20_10_SS_Duplicate_EUF	May 16, 2022	8:10PM	AUS Leachate - pH 5.0	M22-My0038926	X		X	
22	SX_OB_20220516_20_08_SS_Primary_EUF	May 16, 2022	8:08PM	AUS Leachate - pH 5.0	M22-My0038927	X		X	
23	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	AUS Leachate - pH 5.0	M22-My0038928	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
24	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	AUS Leachate - pH 5.0	M22-My0038929	X		X	
25	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	AUS Leachate - Reagent Water	M22-My0038930	X		X	
26	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	AUS Leachate - Reagent Water	M22-My0038931	X		X	
27	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - Reagent Water	M22-My0038932	X		X	
28	SX_IB_202205	May 16, 2022	12:20PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	16_12_20_SS _Primary_EUF			- Reagent Water	My0038933				
29	SX_OB_20220 516_16_20_S S_Primary_EU F	May 16, 2022	4:20PM	AUS Leachate - Reagent Water	M22- My0038934	X		X	
30	SX_OB_20220 516_16_22_S S_Duplicate_E UF	May 16, 2022	4:21PM	AUS Leachate - Reagent Water	M22- My0038935	X		X	
31	SX_IB_202205 16_20_00_SS _Primary_EUF	May 16, 2022	8:00PM	AUS Leachate - Reagent Water	M22- My0038936	X		X	
32	SX_OB_20220	May 16, 2022	8:10PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
32	SX_OB_20220516_20_10_SS_Duplicate_EUF	May 16, 2022	8:10PM	AUS Leachate - Reagent Water	M22-My0038937				
33	SX_OB_20220516_20_08_SS_Primary_EUF	May 16, 2022	8:08PM	AUS Leachate - Reagent Water	M22-My0038938	X		X	
34	SX_IB_20220517_00_05_SS_Primary_EUF	May 17, 2022	12:05AM	AUS Leachate - Reagent Water	M22-My0038939	X		X	
35	SX_IB_20220517_03_57_SS_Primary_EUF	May 17, 2022	3:57AM	AUS Leachate - Reagent Water	M22-My0038940	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IMRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217				
Brisbane Laboratory - NATA # 1261 Site # 20794				
Mayfield Laboratory - NATA # 1261 Site # 25079				
Perth Laboratory - NATA # 2377 Site # 2370				
External Laboratory				
Test Counts	22	11	35	11

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1			1	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1			1	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/kg	< 5		5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5		5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5		5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5		5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5		5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5		5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5		5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5		5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5		5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5		5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5		5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5		5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5		5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5		5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5		5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10		10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10		10	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5		5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5		5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5		5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5		5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5		5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5		5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5		5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5		5	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10		10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5		5	Pass	
LCS - % Recovery						
Total Recoverable Hydrocarbons						
TRH C6-C9	%	83		70-130	Pass	
TRH C10-C14	%	97		70-130	Pass	
Naphthalene	%	77		70-130	Pass	
TRH C6-C10	%	84		70-130	Pass	
TRH >C10-C16	%	92		70-130	Pass	
LCS - % Recovery						
Volatile Organics						
1.1-Dichloroethene	%	103		70-130	Pass	
1.1.1-Trichloroethane	%	74		70-130	Pass	
1.2-Dichlorobenzene	%	87		70-130	Pass	
1.2-Dichloroethane	%	105		70-130	Pass	
Benzene	%	77		70-130	Pass	
Ethylbenzene	%	83		70-130	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	87		70-130	Pass	
Toluene	%	74		70-130	Pass	
Trichloroethene	%	79		70-130	Pass	
Xylenes - Total*	%	84		70-130	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	%	80		70-130	Pass	
Acenaphthylene	%	114		70-130	Pass	
Anthracene	%	114		70-130	Pass	
Benz(a)anthracene	%	84		70-130	Pass	
Benzo(a)pyrene	%	122		70-130	Pass	
Benzo(b&i)fluoranthene	%	114		70-130	Pass	
Benzo(g,h,i)perylene	%	86		70-130	Pass	
Benzo(k)fluoranthene	%	80		70-130	Pass	
Chrysene	%	104		70-130	Pass	
Dibenz(a,h)anthracene	%	109		70-130	Pass	
Fluoranthene	%	110		70-130	Pass	
Fluorene	%	117		70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	98		70-130	Pass	
Naphthalene	%	105		70-130	Pass	
Phenanthrene	%	97		70-130	Pass	
Pyrene	%	112		70-130	Pass	
LCS - % Recovery						
Organochlorine Pesticides						
Chlordanes - Total	%	93		70-130	Pass	
4,4'-DDD	%	92		70-130	Pass	
4,4'-DDE	%	112		70-130	Pass	
4,4'-DDT	%	87		70-130	Pass	
a-HCH	%	129		70-130	Pass	
Aldrin	%	98		70-130	Pass	
b-HCH	%	122		70-130	Pass	
d-HCH	%	95		70-130	Pass	
Dieldrin	%	120		70-130	Pass	
Endosulfan I	%	91		70-130	Pass	
Endosulfan II	%	127		70-130	Pass	
Endosulfan sulphate	%	112		70-130	Pass	
Endrin	%	102		70-130	Pass	
Endrin aldehyde	%	115		70-130	Pass	
Endrin ketone	%	97		70-130	Pass	
g-HCH (Lindane)	%	120		70-130	Pass	
Heptachlor	%	126		70-130	Pass	
Heptachlor epoxide	%	119		70-130	Pass	
Hexachlorobenzene	%	124		70-130	Pass	
Methoxychlor	%	114		70-130	Pass	
LCS - % Recovery						
Polychlorinated Biphenyls						
Aroclor-1260	%	87		70-130	Pass	
LCS - % Recovery						
Phenols (Halogenated)						
2-Chlorophenol	%	104		25-140	Pass	
2,4-Dichlorophenol	%	92		25-140	Pass	
2,4,5-Trichlorophenol	%	91		25-140	Pass	
2,4,6-Trichlorophenol	%	95		25-140	Pass	
2,6-Dichlorophenol	%	93		25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	101		25-140	Pass	
Pentachlorophenol	%	66		25-140	Pass	
Tetrachlorophenols - Total	%	72		25-140	Pass	
LCS - % Recovery						
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	%	34		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	62		25-140	Pass	
2-Nitrophenol	%	108		25-140	Pass	
2,4-Dimethylphenol	%	60		25-140	Pass	
2,4-Dinitrophenol	%	51		25-140	Pass	
2-Methylphenol (o-Cresol)	%	76		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	114		25-140	Pass	
4-Nitrophenol	%	63		25-140	Pass	
Dinoseb	%	85		25-140	Pass	
Phenol	%	115		25-140	Pass	
LCS - % Recovery						
Chromium (hexavalent)	%	78		70-130	Pass	
Cyanide (total)	%	88		70-130	Pass	
Fluoride (Total)	%	121		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	104		80-120	Pass	
Cadmium	%	110		80-120	Pass	
Chromium	%	104		80-120	Pass	
Copper	%	104		80-120	Pass	
Lead	%	104		80-120	Pass	
Mercury	%	100		80-120	Pass	
Molybdenum	%	104		80-120	Pass	
Nickel	%	103		80-120	Pass	
Selenium	%	99		80-120	Pass	
Silver	%	103		80-120	Pass	
Tin	%	103		80-120	Pass	
Zinc	%	104		80-120	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	82		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	84		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	82		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	77		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	86		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	73		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	107		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	79		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	93		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	94		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	%	81		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	93		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	77		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	110		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	82		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	52		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	60			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)								
Perfluorobutanesulfonic acid (PFBS)	%	85			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	116			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	90			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	74			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	73			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	58			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	85			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	99			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	89			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)	%	102			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	105			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C10-C14	M22-My0033738	NCP	%	92		70-130	Pass	
TRH >C10-C16	M22-My0033738	NCP	%	88		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-My0028305	NCP	%	76		70-130	Pass	
Acenaphthylene	M22-My0028305	NCP	%	95		70-130	Pass	
Anthracene	M22-My0028305	NCP	%	87		70-130	Pass	
Benz(a)anthracene	M22-My0028305	NCP	%	84		70-130	Pass	
Benzo(a)pyrene	M22-My0028305	NCP	%	105		70-130	Pass	
Benzo(b&j)fluoranthene	M22-My0028305	NCP	%	88		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0028305	NCP	%	116		70-130	Pass	
Benzo(k)fluoranthene	M22-My0028305	NCP	%	93		70-130	Pass	
Chrysene	M22-My0028305	NCP	%	105		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0028305	NCP	%	85		70-130	Pass	
Fluoranthene	M22-My0028305	NCP	%	88		70-130	Pass	
Fluorene	M22-My0028305	NCP	%	100		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-My0028305	NCP	%	78		70-130	Pass	
Naphthalene	M22-My0028305	NCP	%	97		70-130	Pass	
Phenanthrene	M22-My0028305	NCP	%	83		70-130	Pass	
Pyrene	M22-My0028305	NCP	%	93		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	M22-My0034061	NCP	%	102		70-130	Pass	
4,4'-DDD	M22-My0034061	NCP	%	105		70-130	Pass	
4,4'-DDE	M22-My0034061	NCP	%	116		70-130	Pass	
4,4'-DDT	M22-My0034061	NCP	%	99		70-130	Pass	
a-HCH	M22-My0034061	NCP	%	114		70-130	Pass	
Aldrin	M22-My0034061	NCP	%	106		70-130	Pass	
b-HCH	M22-My0034061	NCP	%	95		70-130	Pass	
d-HCH	M22-My0034061	NCP	%	121		70-130	Pass	
Dieldrin	M22-My0034061	NCP	%	88		70-130	Pass	
Endosulfan I	M22-My0034061	NCP	%	88		70-130	Pass	
Endosulfan II	M22-My0034061	NCP	%	109		70-130	Pass	
Endosulfan sulphate	M22-My0034061	NCP	%	119		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Endrin	M22-My0034061	NCP	%	105		70-130	Pass	
Endrin aldehyde	M22-My0034061	NCP	%	78		70-130	Pass	
Endrin ketone	M22-My0034061	NCP	%	94		70-130	Pass	
g-HCH (Lindane)	M22-My0034061	NCP	%	86		70-130	Pass	
Heptachlor	M22-My0046540	NCP	%	103		70-130	Pass	
Heptachlor epoxide	M22-My0034061	NCP	%	80		70-130	Pass	
Hexachlorobenzene	M22-My0034061	NCP	%	98		70-130	Pass	
Methoxychlor	M22-My0034061	NCP	%	95		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-My0028305	NCP	%	89		30-130	Pass	
2,4-Dichlorophenol	M22-My0028305	NCP	%	80		30-130	Pass	
2,4,5-Trichlorophenol	M22-My0028305	NCP	%	40		30-130	Pass	
2,4,6-Trichlorophenol	M22-My0028305	NCP	%	83		30-130	Pass	
2,6-Dichlorophenol	M22-My0028305	NCP	%	85		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0028305	NCP	%	95		30-130	Pass	
Pentachlorophenol	M22-My0028305	NCP	%	73		30-130	Pass	
Tetrachlorophenols - Total	M22-My0028305	NCP	%	69		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-My0028305	NCP	%	57		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-My0044147	NCP	%	44		30-130	Pass	
2-Nitrophenol	M22-My0028305	NCP	%	97		30-130	Pass	
2,4-Dimethylphenol	M22-My0028305	NCP	%	72		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-My0028305	NCP	%	66		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0028305	NCP	%	107		30-130	Pass	
4-Nitrophenol	M22-My0028305	NCP	%	61		30-130	Pass	
Dinoseb	M22-My0028305	NCP	%	67		30-130	Pass	
Phenol	M22-My0028305	NCP	%	102		30-130	Pass	
Spike - % Recovery								
				Result 1				
Cyanide (total)	M22-My0028310	NCP	%	104		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-My0030372	NCP	%	113		75-125	Pass	
Cadmium	M22-My0030372	NCP	%	113		75-125	Pass	
Chromium	M22-My0030372	NCP	%	128		75-125	Fail	Q08
Copper	M22-My0030372	NCP	%	106		75-125	Pass	
Lead	M22-My0034542	NCP	%	97		75-125	Pass	
Mercury	M22-My0034542	NCP	%	102		75-125	Pass	
Molybdenum	M22-My0030372	NCP	%	104		75-125	Pass	
Nickel	M22-My0030372	NCP	%	120		75-125	Pass	
Selenium	M22-My0030372	NCP	%	99		75-125	Pass	
Silver	M22-My0030372	NCP	%	103		75-125	Pass	
Tin	M22-My0030372	NCP	%	93		75-125	Pass	
Zinc	M22-My0034542	NCP	%	105		75-125	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C6-C9	M22-My0038907	CP	%	84		70-130	Pass	
Naphthalene	M22-My0038907	CP	%	79		70-130	Pass	
TRH C6-C10	M22-My0038907	CP	%	84		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
1,1-Dichloroethene	M22-My0038907	CP	%	71		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
1.1.1-Trichloroethane	M22-My0038907	CP	%	79		70-130	Pass	
1.2-Dichlorobenzene	M22-My0038907	CP	%	84		70-130	Pass	
1.2-Dichloroethane	M22-My0038907	CP	%	91		70-130	Pass	
Benzene	M22-My0038907	CP	%	82		70-130	Pass	
Ethylbenzene	M22-My0038907	CP	%	82		70-130	Pass	
m&p-Xylenes	M22-My0038907	CP	%	77		70-130	Pass	
o-Xylene	M22-My0038907	CP	%	77		70-130	Pass	
Toluene	M22-My0038907	CP	%	90		70-130	Pass	
Trichloroethene	M22-My0038907	CP	%	85		70-130	Pass	
Xylenes - Total*	M22-My0038907	CP	%	77		70-130	Pass	
Spike - % Recovery								
				Result 1				
Chromium (hexavalent)	M22-My0038909	CP	%	81		70-130	Pass	
Fluoride (Total)	M22-My0038909	CP	%	106		70-130	Pass	
Spike - % Recovery								
				Result 1				
Fluoride (Total)	M22-My0038911	CP	%	91		70-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2.4-Dinitrophenol	M22-My0046575	NCP	%	39		30-130	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-My0038918	CP	%	84		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0038918	CP	%	72		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0038918	CP	%	84		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0038918	CP	%	85		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0038918	CP	%	88		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0038918	CP	%	90		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0038918	CP	%	84		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0038918	CP	%	99		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0038918	CP	%	91		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-My0038918	CP	%	88		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0038918	CP	%	91		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-My0038918	CP	%	88		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0038918	CP	%	104		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0038918	CP	%	84		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0038918	CP	%	76		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0038918	CP	%	86		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0038918	CP	%	78		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0038918	CP	%	83		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-My0038918	CP	%	91		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorononanesulfonic acid (PFNS)	M22-My0038918	CP	%	103			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0038918	CP	%	98			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0038918	CP	%	105			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0038918	CP	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0038918	CP	%	85			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0038918	CP	%	85			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0038918	CP	%	87			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0038918	CP	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0038918	CP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0038918	CP	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0038918	CP	%	81			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-My0038906	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-My0030730	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-My0030730	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-My0030730	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-My0033748	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-My0033748	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-My0030730	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-My0030730	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-My0030730	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.3-Dichloropropane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3.5-Trimethylbenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-My0038906	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0038906	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0038906	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0038906	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0038906	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0038906	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0038906	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Indeno(1.2.3-cd)pyrene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4.4'-DDD	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDE	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDT	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0028306	NCP	mg/kg	< 0.05	0.07	53	30%	Fail Q15
b-HCH	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-My0041628	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0028306	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0028306	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dichlorophenol	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-Trichlorophenol	M22-My0028306	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2.4.6-Trichlorophenol	M22-My0028306	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2.6-Dichlorophenol	M22-My0041628	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0028306	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0028306	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0028306	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	M22-My0028306	NCP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	M22-My0028306	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0028306	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	M22-My0028306	NCP	mg/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Methylphenol (o-Cresol)	M22-My0028306	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0028306	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0028306	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0028306	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0028306	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Cyanide (total)	M22-My0042763	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Fluoride (Total)	M22-My0031281	NCP	mg/kg	190	120	41	30%	Fail
								Q15
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-My0030371	NCP	mg/kg	15	16	6.0	30%	Pass
Cadmium	M22-My0030371	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M22-My0030371	NCP	mg/kg	27	28	5.0	30%	Pass
Copper	M22-My0030371	NCP	mg/kg	5.5	5.6	3.0	30%	Pass
Lead	M22-My0030371	NCP	mg/kg	38	39	5.0	30%	Pass
Mercury	M22-My0030371	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0030371	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0030371	NCP	mg/kg	18	19	8.0	30%	Pass
Selenium	M22-My0030371	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M22-My0030371	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0030371	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0030371	NCP	mg/kg	16	18	12	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
pH (1:5 Aqueous extract at 25°C as rec.)	M22-My0038910	CP	pH Units	7.3	7.4	pass	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0038914	CP	%	33	32	4.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0038917	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTTrDA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTEDA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0038917	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0038917	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0038917	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-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0038917	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0038917	CP	ug/kg	< 5	< 5	<1	30%	Pass

Comments

This report has been revised (V2) to correct sample names

SX_OB_20220516_20_00_SS_Primary_EUFto SX_IB_20220516_20_00_SS_Primary_EUF
 SX_OB_20220517_00_05_SS_Primary_EUFto SX_IB_20220517_00_05_SS_Primary_EUF
 SX_OB_20220517_03_57_SS_Primary_EUFto SX_IB_20220517_03_57_SS_Primary_EUF

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Michael Cassidy	Analytical Services Manager
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
Mary Makarios	Senior Analyst-Metal
Mary Makarios	Senior Analyst-Sample Properties
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](#).

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

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 **889101-W**
Project name **20220517043542-Eurofin-12**
Project ID **JC0927**
Received Date **May 17, 2022**

Client Sample ID			SX_OB_20220 516_16_55_SR _Rinsate_EUF	SX_OB_20220 516_16_57_SB _Blank_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0038912	M22- My0038913
Date Sampled			May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	103	110
13C5-PFPeA (surr.)	1	%	127	119
13C5-PFHxA (surr.)	1	%	105	115
13C4-PFHpA (surr.)	1	%	92	102
13C8-PFOA (surr.)	1	%	96	103
13C5-PFNA (surr.)	1	%	104	112
13C6-PFDA (surr.)	1	%	113	125
13C2-PFUnDA (surr.)	1	%	87	99
13C2-PFDoDA (surr.)	1	%	141	172
13C2-PFTeDA (surr.)	1	%	101	139
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	25	23

Client Sample ID			SX_OB_20220 516_16_55_SR _Rinsate_EUF	SX_OB_20220 516_16_57_SB _Blank_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22- My0038912	M22- My0038913
Date Sampled			May 16, 2022	May 16, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D3-N-MeFOSA (surr.)	1	%	13	25
D5-N-EtFOSA (surr.)	1	%	27	11
D7-N-MeFOSE (surr.)	1	%	22	15
D9-N-EtFOSE (surr.)	1	%	32	13
D5-N-EtFOSAA (surr.)	1	%	31	32
D3-N-MeFOSAA (surr.)	1	%	45	54
Perfluoroalkyl sulfonic acids (PFASs)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	114	119
18O2-PFHxS (surr.)	1	%	91	111
13C8-PFOS (surr.)	1	%	136	144
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	98	95
13C2-6:2 FTSA (surr.)	1	%	97	119
13C2-8:2 FTSA (surr.)	1	%	98	103
13C2-10:2 FTSA (surr.)	1	%	159	168
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	May 17, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	May 17, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	May 17, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	May 17, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	May 17, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_IB_20220516_08_07_SS_Triplicate_EUF	May 16, 2022	8:07AM	Soil	M22-My0038906		X	X	X
2	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	Soil	M22-My0038907		X	X	X
3	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	Soil	M22-My0038908		X	X	X
4	SX_IB_20220516_12_20_SS	May 16, 2022	12:20PM	Soil	M22-My0038909		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Primary_EUF								
5	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:20PM	Soil	M22-My0038910		X	X	X
6	SX_OB_20220516_16_22_S_S_Duplicate_EUF	May 16, 2022	4:21PM	Soil	M22-My0038911		X	X	X
7	SX_OB_20220516_16_55_S_R_Rinsate_EUF	May 16, 2022	4:55PM	Water	M22-My0038912			X	
8	SX_OB_20220	May 16, 2022	4:57PM	Water	M22-			X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
8	SX_OB_20220516_16_57_S B_Blank_EUF	May 16, 2022	4:57PM	Water	M22-My0038913				
9	SX_OB_20220516_20_00_S S_Primary_EUF	May 16, 2022	8:00PM	Soil	M22-My0038914		X	X	X
10	SX_OB_20220516_20_10_S S_Duplicate_EUF	May 16, 2022	8:10PM	Soil	M22-My0038915		X	X	X
11	SX_OB_20220516_20_08_S S_Primary_EUF	May 16, 2022	8:08PM	Soil	M22-My0038916		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
12	SX_OB_20220517_00_05_S_S_Primary_EU_F	May 17, 2022	12:05AM	Soil	M22-My0038917		X	X	X
13	SX_OB_20220517_03_57_S_S_Primary_EU_F	May 17, 2022	3:57AM	Soil	M22-My0038918		X	X	X
14	SX_IB_20220516_08_07_SS_Triplicate_EU_F	May 16, 2022	8:07AM	AUS Leachate - pH 5.0	M22-My0038919	X		X	
15	SX_IB_202205	May 16, 2022	8:11AM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
15	SX_IB_20220516_08_11_SS_Primary_EUF	May 16, 2022	8:11AM	AUS Leachate - pH 5.0	M22-My0038920				
16	SX_IB_20220516_12_15_SS_Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - pH 5.0	M22-My0038921	X		X	
17	SX_IB_20220516_12_20_SS_Primary_EUF	May 16, 2022	12:20PM	AUS Leachate - pH 5.0	M22-My0038922	X		X	
18	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:20PM	AUS Leachate - pH 5.0	M22-My0038923	X		X	
19	SX_OB_20220516_16_20_S_S_Primary_EUF	May 16, 2022	4:21PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	516_16_22_S S_Duplicate_E UF			- pH 5.0	My0038924				
20	SX_OB_20220 516_20_00_S S_Primary_EU F	May 16, 2022	8:00PM	AUS Leachate - pH 5.0	M22- My0038925	X		X	
21	SX_OB_20220 516_20_10_S S_Duplicate_E UF	May 16, 2022	8:10PM	AUS Leachate - pH 5.0	M22- My0038926	X		X	
22	SX_OB_20220 516_20_08_S S_Primary_EU	May 16, 2022	8:08PM	AUS Leachate - pH 5.0	M22- My0038927	X		X	

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

Project Name: 20220517043542-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 889101
Phone: 08 8338 1009
Fax:

Received: May 17, 2022 11:30 AM
Due: May 24, 2022
Priority: 5 Day
Contact Name: - ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
23	SX_OB_20220517_00_05_S_S_Primary_EU_F	May 17, 2022	12:05AM	AUS Leachate - pH 5.0	M22-My0038928	X		X	
24	SX_OB_20220517_03_57_S_S_Primary_EU_F	May 17, 2022	3:57AM	AUS Leachate - pH 5.0	M22-My0038929	X		X	
25	SX_IB_20220516_08_07_SS_Triplicate_EU_F	May 16, 2022	8:07AM	AUS Leachate - Reagent Water	M22-My0038930	X		X	
26	SX_IB_202205	May 16, 2022	8:11AM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	16_08_11_SS _Primary_EUF			- Reagent Water	My0038931				
27	SX_IB_202205 16_12_15_SS _Primary_EUF	May 16, 2022	12:15PM	AUS Leachate - Reagent Water	M22- My0038932	X		X	
28	SX_IB_202205 16_12_20_SS _Primary_EUF	May 16, 2022	12:20PM	AUS Leachate - Reagent Water	M22- My0038933	X		X	
29	SX_OB_20220 516_16_20_S S_Primary_EU F	May 16, 2022	4:20PM	AUS Leachate - Reagent Water	M22- My0038934	X		X	
30	SX_OB_20220 516_16_22_S	May 16, 2022	4:21PM	AUS Leachate - Reagent	M22- My0038935	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	516_16_22_S S_Duplicate_E UF			- Reagent Water	My0038935				
31	SX_OB_20220 516_20_00_S S_Primary_EU F	May 16, 2022	8:00PM	AUS Leachate - Reagent Water	M22- My0038936	X		X	
32	SX_OB_20220 516_20_10_S S_Duplicate_E UF	May 16, 2022	8:10PM	AUS Leachate - Reagent Water	M22- My0038937	X		X	
33	SX_OB_20220 516_20_08_S S_Primary_EU	May 16, 2022	8:08PM	AUS Leachate - Reagent Water	M22- My0038938	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 17, 2022 11:30 AM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	889101	Due:	May 24, 2022
Project Name:	20220517043542-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	- ALL SPOIL REPORTS WGTP

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
34	SX_OB_20220517_00_05_S_S_Primary_EU_F	May 17, 2022	12:05AM	AUS Leachate - Reagent Water	M22-My0038939	X		X	
35	SX_OB_20220517_03_57_S_S_Primary_EU_F	May 17, 2022	3:57AM	AUS Leachate - Reagent Water	M22-My0038940	X		X	
Test Counts						22	11	35	11

Internal Quality Control Review and Glossary
General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05		0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	128		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	127		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	109		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	144		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	139		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	140		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	108		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	93		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	105		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	122		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	132		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	96			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	83			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	135			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	69			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	128			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	115			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	136			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSAs)								
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	98			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	135			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	117			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	121			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	120			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	52			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	130			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)	%	124			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	121			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	M22-My0038913	CP	%	112		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0038913	CP	%	120		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0038913	CP	%	103		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0038913	CP	%	143		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0038913	CP	%	139		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0038913	CP	%	125		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0038913	CP	%	132		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0038913	CP	%	126		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0038913	CP	%	148		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0038913	CP	%	102		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0038913	CP	%	132		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	M22-My0038913	CP	%	85		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0038913	CP	%	110		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0038913	CP	%	97		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSAs)								
				Result 1				

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorobutanesulfonic acid (PFBS)	M22-My0038913	CP	%	92			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0038913	CP	%	97			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0038913	CP	%	97			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0038913	CP	%	112			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0038913	CP	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0038913	CP	%	99			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0038913	CP	%	106			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0038913	CP	%	63			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0038913	CP	%	147			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0038913	CP	%	126			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0038913	CP	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0038913	CP	%	94			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0041031	NCP	ug/L	1.1	1.3	13	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0041031	NCP	ug/L	0.14	0.15	2.0	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0041031	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-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0041031	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0041031	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0041031	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](#).

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

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 **891648-L**
Project name **20220525163202-Eurofin-6**
Project ID **JC0927**
Received Date **May 25, 2022**

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_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- My0061159	M22- My0061160	M22- My0061161	M22- My0061162
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.1	5.1	5.1	5.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	90	91	108	100
13C5-PFPeA (surr.)	1	%	116	111	134	108
13C5-PFHxA (surr.)	1	%	76	71	67	101
13C4-PFHpA (surr.)	1	%	105	108	138	112
13C8-PFOA (surr.)	1	%	71	84	110	58
13C5-PFNA (surr.)	1	%	102	123	130	116
13C6-PFDA (surr.)	1	%	102	134	76	120
13C2-PFUnDA (surr.)	1	%	57	57	90	24
13C2-PFDoDA (surr.)	1	%	92	94	106	85
13C2-PFTeDA (surr.)	1	%	97	109	117	70

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_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- My0061159	M22- My0061160	M22- My0061161	M22- My0061162
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	94	102	98	93
D3-N-MeFOSA (surr.)	1	%	100	98	103	79
D5-N-EtFOSA (surr.)	1	%	100	84	102	67
D7-N-MeFOSE (surr.)	1	%	98	103	70	93
D9-N-EtFOSE (surr.)	1	%	100	100	108	94
D5-N-EtFOSAA (surr.)	1	%	101	114	135	59
D3-N-MeFOSAA (surr.)	1	%	63	99	74	68
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	93	91	94	124
18O2-PFHxS (surr.)	1	%	72	108	115	62
13C8-PFOS (surr.)	1	%	71	95	85	67
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	73	85	122	70
13C2-6:2 FTSA (surr.)	1	%	57	94	95	61
13C2-8:2 FTSA (surr.)	1	%	82	76	84	64
13C2-10:2 FTSA (surr.)	1	%	43	62	86	92
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_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- My0061163	M22- My0061164	M22- My0061165	M22- My0061166
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	4.9	4.9
pH (off)	0.1	pH Units	5.1	5.1	5.1	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	94	114	102	106
13C5-PFPeA (surr.)	1	%	93	133	123	117
13C5-PFHxA (surr.)	1	%	93	107	104	94
13C4-PFHpA (surr.)	1	%	102	103	106	123
13C8-PFOA (surr.)	1	%	74	85	67	88
13C5-PFNA (surr.)	1	%	99	108	104	127
13C6-PFDA (surr.)	1	%	96	125	58	119
13C2-PFUnDA (surr.)	1	%	49	73	64	101
13C2-PFDoDA (surr.)	1	%	82	86	77	93
13C2-PFTTeDA (surr.)	1	%	79	82	77	108
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	94	103	100	113
D3-N-MeFOSA (surr.)	1	%	104	90	71	118
D5-N-EtFOSA (surr.)	1	%	107	88	68	115
D7-N-MeFOSE (surr.)	1	%	112	107	90	113
D9-N-EtFOSE (surr.)	1	%	110	111	92	120
D5-N-EtFOSAA (surr.)	1	%	108	95	96	109
D3-N-MeFOSAA (surr.)	1	%	61	74	79	60

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_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- My0061163	M22- My0061164	M22- My0061165	M22- My0061166
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	116	130	125	130
18O2-PFHxS (surr.)	1	%	37	89	106	106
13C8-PFOS (surr.)	1	%	67	91	86	98
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	57	79	67	112
13C2-6:2 FTSA (surr.)	1	%	34	52	64	64
13C2-8:2 FTSA (surr.)	1	%	25	69	65	63
13C2-10:2 FTSA (surr.)	1	%	28	38	85	94
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 25_14_46_SS _Duplicate_EUF	SX_IB_202205 25_14_58_SS _Triplicate_EUF	SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061167	M22- My0061168	M22- My0061169	M22- My0061170
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	4.9	4.9	5.9	5.9
pH (off)	0.1	pH Units	5.2	5.2	8.4	8.6

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF	SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061167	M22- My0061168	M22- My0061169	M22- My0061170
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	116	107	81	103
13C5-PFPeA (surr.)	1	%	128	118	75	109
13C5-PFHxA (surr.)	1	%	108	109	76	104
13C4-PFHpA (surr.)	1	%	117	124	74	103
13C8-PFOA (surr.)	1	%	102	84	57	45
13C5-PFNA (surr.)	1	%	122	121	80	106
13C6-PFDA (surr.)	1	%	115	79	78	114
13C2-PFUnDA (surr.)	1	%	17	76	82	112
13C2-PFDoDA (surr.)	1	%	123	108	79	102
13C2-PFTTeDA (surr.)	1	%	106	101	91	94
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	116	122	96	126
D3-N-MeFOSA (surr.)	1	%	134	134	50	59
D5-N-EtFOSA (surr.)	1	%	117	146	58	61
D7-N-MeFOSE (surr.)	1	%	123	121	45	78
D9-N-EtFOSE (surr.)	1	%	127	134	71	86
D5-N-EtFOSAA (surr.)	1	%	112	108	94	105
D3-N-MeFOSAA (surr.)	1	%	94	55	57	81
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS TriPLICATE_EUF	SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061167	M22- My0061168	M22- My0061169	M22- My0061170
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSA)s						
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	147	123	66	76
18O2-PFHxS (surr.)	1	%	102	129	83	110
13C8-PFOS (surr.)	1	%	108	68	86	113
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)s						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	141	124	36	73
13C2-6:2 FTSA (surr.)	1	%	76	45	44	76
13C2-8:2 FTSA (surr.)	1	%	70	59	44	72
13C2-10:2 FTSA (surr.)	1	%	118	35	94	130
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 525_14_06_SS TriPLICATE_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF	SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061171	M22- My0061172	M22- My0061173	M22- My0061174
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.9	5.9	5.9	5.9
pH (off)	0.1	pH Units	8.6	8.6	8.7	8.6
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 525_14_06_SS _Triuplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF	SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061171	M22- My0061172	M22- My0061173	M22- My0061174
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	110	83	83	94
13C5-PFPeA (surr.)	1	%	142	63	97	88
13C5-PFHxA (surr.)	1	%	113	107	98	107
13C4-PFHpA (surr.)	1	%	104	104	108	91
13C8-PFOA (surr.)	1	%	44	57	98	90
13C5-PFNA (surr.)	1	%	119	87	89	87
13C6-PFDA (surr.)	1	%	120	97	96	85
13C2-PFUnDA (surr.)	1	%	129	75	96	96
13C2-PFDoDA (surr.)	1	%	126	91	93	91
13C2-PFTeDA (surr.)	1	%	114	96	96	106
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	146	107	107	107
D3-N-MeFOSA (surr.)	1	%	83	69	67	69
D5-N-EtFOSA (surr.)	1	%	98	64	70	70
D7-N-MeFOSE (surr.)	1	%	111	71	102	71
D9-N-EtFOSE (surr.)	1	%	108	76	81	76
D5-N-EtFOSAA (surr.)	1	%	117	116	92	105
D3-N-MeFOSAA (surr.)	1	%	83	57	70	57
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	75	114	101	114
18O2-PFHxS (surr.)	1	%	118	98	90	98
13C8-PFOS (surr.)	1	%	143	77	73	77

Client Sample ID			SX_OB_20220 525_14_06_SS _TriPLICATE_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF	SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061171	M22- My0061172	M22- My0061173	M22- My0061174
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	85	44	44	39
13C2-6:2 FTSA (surr.)	1	%	79	49	49	49
13C2-8:2 FTSA (surr.)	1	%	73	49	52	49
13C2-10:2 FTSA (surr.)	1	%	127	112	78	112
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 525_14_31_SS _TriPLICATE_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF	SX_IB_202205 25_14_46_SS _Duplicate_EUF	SX_IB_202205 25_14_58_SS _TriPLICATE_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061175	M22- My0061176	M22- My0061177	M22- My0061178
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.9	5.9	5.9	5.9
pH (off)	0.1	pH Units	8.7	9.2	9.3	9.3
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	82	85	93	86

Client Sample ID			SX_OB_20220 525_14_31_SS _TriPLICATE_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF	SX_IB_202205 25_14_46_SS _Duplicate_EUF	SX_IB_202205 25_14_58_SS _TriPLICATE_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- My0061175	M22- My0061176	M22- My0061177	M22- My0061178
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	112	88	84	80
13C5-PFHxA (surr.)	1	%	96	85	86	81
13C4-PFHpA (surr.)	1	%	104	80	84	84
13C8-PFOA (surr.)	1	%	86	85	85	82
13C5-PFNA (surr.)	1	%	94	81	89	83
13C6-PFDA (surr.)	1	%	94	90	93	85
13C2-PFUnDA (surr.)	1	%	100	89	87	94
13C2-PFDoDA (surr.)	1	%	91	89	90	89
13C2-PFTeDA (surr.)	1	%	87	109	99	119
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	108	93	110	102
D3-N-MeFOSA (surr.)	1	%	61	76	83	85
D5-N-EtFOSA (surr.)	1	%	64	76	106	92
D7-N-MeFOSE (surr.)	1	%	104	85	61	92
D9-N-EtFOSE (surr.)	1	%	78	72	83	84
D5-N-EtFOSAA (surr.)	1	%	116	96	108	97
D3-N-MeFOSAA (surr.)	1	%	62	65	78	60
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	97	92	94	89
18O2-PFHxS (surr.)	1	%	92	87	94	84
13C8-PFOS (surr.)	1	%	89	102	103	104

Client Sample ID			SX_OB_20220525_14_31_SS_Triplicate_EUF	SX_IB_20220525_14_42_SS_Primary_EUF	SX_IB_20220525_14_46_SS_Duplicate_EUF	SX_IB_20220525_14_58_SS_Triplicate_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-My0061175	M22-My0061176	M22-My0061177	M22-My0061178
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	41	54	56	58
13C2-6:2 FTSA (surr.)	1	%	54	48	54	41
13C2-8:2 FTSA (surr.)	1	%	53	49	60	54
13C2-10:2 FTSA (surr.)	1	%	119	87	69	84
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
AUS Leaching Procedure			
pH (initial) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 25, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 25, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	May 25, 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	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	Soil	M22-My0061147		X	X	X
2	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	Soil	M22-My0061148		X	X	X
3	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	Soil	M22-My0061149		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220525_14_14_S_S_Primary_EU_F	May 25, 2022	2:14PM	Soil	M22-My0061150		X	X	X
5	SX_OB_20220525_14_17_S_S_Primary_EU_F	May 25, 2022	2:17PM	Soil	M22-My0061151		X	X	X
6	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	Soil	M22-My0061152		X	X	X
7	SX_OB_20220525_14_31_S	May 25, 2022	2:31PM	Soil	M22-My0061153		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF								
8	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	Soil	M22-My0061154		X	X	X
9	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	Soil	M22-My0061155		X	X	X
10	SX_IB_20220525_14_58_SS_Triplicate_EUF	May 25, 2022	2:58PM	Soil	M22-My0061156		X	X	X
11	SX_IB_202205	May 25, 2022	3:02PM	Water	M22-			X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	25_15_02_SB _Blank_EUF				My0061157				
12	SX_IB_202205 25_15_03_SR _Rinsate_EUF	May 25, 2022	3:03PM	Water	M22- My0061158			X	
13	SX_OB_20220 525_13_53_S S_Primary_EU F	May 25, 2022	1:53PM	AUS Leachate - pH 5.0	M22- My0061159	X		X	
14	SX_OB_20220 525_13_57_S S_Primary_EU F	May 25, 2022	1:57PM	AUS Leachate - pH 5.0	M22- My0061160	X		X	
15	SX_OB_20220	May 25, 2022	2:06PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
15	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	AUS Leachate - pH 5.0	M22-My0061161				
16	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - pH 5.0	M22-My0061162	X		X	
17	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - pH 5.0	M22-My0061163	X		X	
18	SX_OB_20220525_14_19_S	May 25, 2022	2:19PM	AUS Leachate - pH 5.0	M22-My0061164	X		X	

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

Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Duplicate_EUF								
19	SX_OB_20220525_14_31_S_S_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - pH 5.0	M22-My0061165	X		X	
20	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - pH 5.0	M22-My0061166	X		X	
21	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - pH 5.0	M22-My0061167	X		X	
22	SX_IB_202205	May 25, 2022	2:58PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
22	SX_IB_20220525_14_58_SS_Triplicate_EU_F	May 25, 2022	2:58PM	AUS Leachate - pH 5.0	M22-My0061168				
23	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	AUS Leachate - Reagent Water	M22-My0061169	X		X	
24	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	AUS Leachate - Reagent Water	M22-My0061170	X		X	
25	SX_OB_20220525_14_06_S	May 25, 2022	2:06PM	AUS Leachate - Reagent	M22-My0061171	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF			Water					
26	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - Reagent Water	M22-My0061172	X		X	
27	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - Reagent Water	M22-My0061173	X		X	
28	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	AUS Leachate - Reagent Water	M22-My0061174	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 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									
29	SX_OB_20220525_14_31_S_S_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - Reagent Water	M22-My0061175	X		X	
30	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - Reagent Water	M22-My0061176	X		X	
31	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - Reagent Water	M22-My0061177	X		X	
32	SX_IB_20220525_14_58_SS_Triplicate_EU	May 25, 2022	2:58PM	AUS Leachate - Reagent Water	M22-My0061178	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail		AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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					
F					
Test Counts		20	10	32	10

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05		0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	106		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	66		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	64		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	84		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	75		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	68		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	80		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	84		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	96		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	84		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	89		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
LCS - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	73			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	131			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	127			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	50			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	74			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	59			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	54			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)								
Perfluorobutanesulfonic acid (PFBS)	%	55			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	89			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	68			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	62			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	62			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	77			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	76			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	73			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	73			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	138			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	97			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	58			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)								
				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances								
				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0061159	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-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0061159	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0061159	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0061169	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-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0061169	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0061169	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0061169	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](#).

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

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 **891648-S**
Project name **20220525163202-Eurofin-6**
Project ID **JC0927**
Received Date **May 25, 2022**

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	76	135	80	147
Toluene-d8 (surr.)	1	%	70	134	78	139
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	70	104	76	87
p-Terphenyl-d14 (surr.)	1	%	77	70	79	58
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	96	89	91	70
Tetrachloro-m-xylene (surr.)	1	%	79	126	52	70

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	96	89	91	70
Tetrachloro-m-xylene (surr.)	1	%	79	126	52	70
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	33	53	30	29
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	250	170	200	140
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	6.5	6.8	6.5	6.5
% Moisture						
% Moisture	1	%	32	34	34	33
Heavy Metals						
Arsenic	2	mg/kg	47	43	51	46
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	160	110	150	130
Copper	5	mg/kg	60	45	50	66
Lead	5	mg/kg	< 5	< 5	5.2	5.8
Mercury	0.1	mg/kg	0.1	< 0.1	0.1	0.1

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	160	110	130	180
Selenium	5	mg/kg	< 5	< 5	< 5	< 5
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	100	73	87	120
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	61	84	67	66
13C5-PFPeA (surr.)	1	%	60	90	88	50
13C5-PFHxA (surr.)	1	%	78	92	74	76
13C4-PFHpA (surr.)	1	%	73	87	71	75
13C8-PFOA (surr.)	1	%	60	94	60	62
13C5-PFNA (surr.)	1	%	79	95	75	76
13C6-PFDA (surr.)	1	%	71	98	72	84
13C2-PFUnDA (surr.)	1	%	72	95	84	72
13C2-PFDoDA (surr.)	1	%	81	93	78	61
13C2-PFTeDA (surr.)	1	%	75	123	76	83
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	78	132	82	90
D3-N-MeFOSA (surr.)	1	%	81	131	84	90
D5-N-EtFOSA (surr.)	1	%	79	136	82	86
D7-N-MeFOSE (surr.)	1	%	34	91	16	14
D9-N-EtFOSE (surr.)	1	%	74	95	70	73
D5-N-EtFOSAA (surr.)	1	%	67	119	93	70
D3-N-MeFOSAA (surr.)	1	%	61	111	76	31

Client Sample ID			SX_OB_20220 525_13_53_SS _Primary_EUF	SX_OB_20220 525_13_57_SS _Primary_EUF	SX_OB_20220 525_14_06_SS _Triplicate_EU F	SX_OB_20220 525_14_14_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061147	M22- My0061148	M22- My0061149	M22- My0061150
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	86	93	80	92
18O2-PFHxS (surr.)	1	%	63	87	63	78
13C8-PFOS (surr.)	1	%	55	94	67	77
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	72	90	66	68
13C2-6:2 FTSA (surr.)	1	%	65	90	64	90
13C2-8:2 FTSA (surr.)	1	%	66	116	69	64
13C2-10:2 FTSA (surr.)	1	%	80	104	118	91
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	70	74	73	68
Toluene-d8 (surr.)	1	%	69	71	57	71
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	130	51	64
p-Terphenyl-d14 (surr.)	1	%	84	79	108	101

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	60	77	96	64
Tetrachloro-m-xylene (surr.)	1	%	64	57	135	119
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	60	77	96	64
Tetrachloro-m-xylene (surr.)	1	%	64	57	135	119
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	31	34	97	72
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	270	110	160	180
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	6.5	7.9	8.6	7.9
% Moisture						
% Moisture	1	%	32	32	32	27
Heavy Metals						
Arsenic	2	mg/kg	60	57	59	27
Cadmium	1	mg/kg	< 1	< 1	< 1	< 1
Chromium	5	mg/kg	160	130	110	120
Copper	5	mg/kg	78	66	57	63
Lead	5	mg/kg	7.2	6.2	5.3	< 5
Mercury	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	200	200	150	180
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	130	130	96	120
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	85	78	84	73
13C5-PFPeA (surr.)	1	%	70	72	68	67
13C5-PFHxA (surr.)	1	%	90	81	82	83

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	79	75	79	79
13C8-PFOA (surr.)	1	%	66	66	63	65
13C5-PFNA (surr.)	1	%	77	74	84	80
13C6-PFDA (surr.)	1	%	88	86	69	82
13C2-PFUnDA (surr.)	1	%	89	67	93	88
13C2-PFDoDA (surr.)	1	%	80	76	84	97
13C2-PFTeDA (surr.)	1	%	91	90	84	104
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	90	85	93	83
D3-N-MeFOSA (surr.)	1	%	79	98	98	89
D5-N-EtFOSA (surr.)	1	%	91	95	90	94
D7-N-MeFOSE (surr.)	1	%	43	76	62	80
D9-N-EtFOSE (surr.)	1	%	82	82	94	84
D5-N-EtFOSAA (surr.)	1	%	72	68	89	93
D3-N-MeFOSAA (surr.)	1	%	98	81	90	106
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	88	77	91	84
18O2-PFHxS (surr.)	1	%	75	69	74	72
13C8-PFOS (surr.)	1	%	83	83	73	81
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	87	71	68	82
13C2-6:2 FTSA (surr.)	1	%	80	88	74	86

Client Sample ID			SX_OB_20220 525_14_17_SS _Primary_EUF	SX_OB_20220 525_14_19_SS _Duplicate_EU F	SX_OB_20220 525_14_31_SS _Triplicate_EU F	SX_IB_202205 25_14_42_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- My0061151	M22- My0061152	M22- My0061153	M22- My0061154
Date Sampled			May 25, 2022	May 25, 2022	May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	69	76	60	76
13C2-10:2 FTSA (surr.)	1	%	95	109	103	149
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_IB_202205 25_14_46_SS _Duplicate_EUF	SX_IB_202205 25_14_58_SS _Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- My0061155	M22- My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100
Volatile Organics				
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- My0061155	M22- My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Volatile Organics				
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	132	73
Toluene-d8 (surr.)	1	%	109	70

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- My0061155	M22- My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	93	59
p-Terphenyl-d14 (surr.)	1	%	124	89
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- My0061155	M22- My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Dibutylchlorendate (surr.)	1	%	90	88
Tetrachloro-m-xylene (surr.)	1	%	115	101
Polychlorinated Biphenyls				
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	90	88
Tetrachloro-m-xylene (surr.)	1	%	115	101
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	66	42
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Chromium (hexavalent)				
Chromium (hexavalent)	1	mg/kg	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5
Fluoride (Total)	100	mg/kg	110	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	6.9	6.6
% Moisture	1	%	25	28

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22- My0061155	M22- My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Heavy Metals				
Arsenic	2	mg/kg	23	35
Cadmium	1	mg/kg	< 1	< 1
Chromium	5	mg/kg	110	140
Copper	5	mg/kg	55	74
Lead	5	mg/kg	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	0.1
Molybdenum	5	mg/kg	< 5	< 5
Nickel	5	mg/kg	180	210
Selenium	5	mg/kg	< 5	< 5
Silver	2	mg/kg	< 2	< 2
Tin	10	mg/kg	< 10	< 10
Zinc	5	mg/kg	110	140
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5
13C4-PFBA (surr.)	1	%	107	62
13C5-PFPeA (surr.)	1	%	111	76
13C5-PFHxA (surr.)	1	%	119	69
13C4-PFHpA (surr.)	1	%	112	68
13C8-PFOA (surr.)	1	%	113	53
13C5-PFNA (surr.)	1	%	112	70
13C6-PFDA (surr.)	1	%	123	67
13C2-PFUnDA (surr.)	1	%	117	72
13C2-PFDoDA (surr.)	1	%	114	79
13C2-PFTeDA (surr.)	1	%	157	73
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10
13C8-FOSA (surr.)	1	%	128	71
D3-N-MeFOSA (surr.)	1	%	127	80

Client Sample ID			SX_IB_202205 25_14_46_SS Duplicate_EUF	SX_IB_202205 25_14_58_SS Triplicate_EUF
Sample Matrix			Soil	Soil
Eurofins Sample No.			M22-My0061155	M22-My0061156
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D5-N-EtFOSA (surr.)	1	%	132	80
D7-N-MeFOSE (surr.)	1	%	116	41
D9-N-EtFOSE (surr.)	1	%	118	62
D5-N-EtFOSAA (surr.)	1	%	152	78
D3-N-MeFOSAA (surr.)	1	%	142	79
Perfluoroalkyl sulfonic acids (PFASs)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5
13C3-PFBS (surr.)	1	%	121	74
18O2-PFHxS (surr.)	1	%	110	56
13C8-PFOS (surr.)	1	%	118	53
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	124	71
13C2-6:2 FTSA (surr.)	1	%	110	66
13C2-8:2 FTSA (surr.)	1	%	142	60
13C2-10:2 FTSA (surr.)	1	%	131	138
PFASs Summations				
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	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 26, 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	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	Soil	M22-My0061147		X	X	X
2	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	Soil	M22-My0061148		X	X	X
3	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	Soil	M22-My0061149		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220525_14_14_S_S_Primary_EU_F	May 25, 2022	2:14PM	Soil	M22-My0061150		X	X	X
5	SX_OB_20220525_14_17_S_S_Primary_EU_F	May 25, 2022	2:17PM	Soil	M22-My0061151		X	X	X
6	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	Soil	M22-My0061152		X	X	X
7	SX_OB_20220525_14_31_S	May 25, 2022	2:31PM	Soil	M22-My0061153		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF								
8	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	Soil	M22-My0061154		X	X	X
9	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	Soil	M22-My0061155		X	X	X
10	SX_IB_20220525_14_58_SS_Triplicate_EUF	May 25, 2022	2:58PM	Soil	M22-My0061156		X	X	X
11	SX_IB_202205	May 25, 2022	3:02PM	Water	M22-			X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	25_15_02_SB _Blank_EUF				My0061157				
12	SX_IB_202205 25_15_03_SR _Rinsate_EUF	May 25, 2022	3:03PM	Water	M22- My0061158			X	
13	SX_OB_20220 525_13_53_S S_Primary_EU F	May 25, 2022	1:53PM	AUS Leachate - pH 5.0	M22- My0061159	X		X	
14	SX_OB_20220 525_13_57_S S_Primary_EU F	May 25, 2022	1:57PM	AUS Leachate - pH 5.0	M22- My0061160	X		X	
15	SX_OB_20220	May 25, 2022	2:06PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
15	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	AUS Leachate - pH 5.0	M22-My0061161				
16	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - pH 5.0	M22-My0061162	X		X	
17	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - pH 5.0	M22-My0061163	X		X	
18	SX_OB_20220525_14_19_S	May 25, 2022	2:19PM	AUS Leachate - pH 5.0	M22-My0061164	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Duplicate_EUF								
19	SX_OB_20220525_14_31_S_S_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - pH 5.0	M22-My0061165	X		X	
20	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - pH 5.0	M22-My0061166	X		X	
21	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - pH 5.0	M22-My0061167	X		X	
22	SX_IB_202205	May 25, 2022	2:58PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
22	SX_IB_20220525_14_58_SS_Triplicate_EU_F	May 25, 2022	2:58PM	AUS Leachate - pH 5.0	M22-My0061168				
23	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	AUS Leachate - Reagent Water	M22-My0061169	X		X	
24	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	AUS Leachate - Reagent Water	M22-My0061170	X		X	
25	SX_OB_20220525_14_06_S	May 25, 2022	2:06PM	AUS Leachate - Reagent	M22-My0061171	X		X	

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

Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF			Water					
26	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - Reagent Water	M22-My0061172	X		X	
27	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - Reagent Water	M22-My0061173	X		X	
28	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	AUS Leachate - Reagent Water	M22-My0061174	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
29	SX_OB_20220525_14_31_S_S_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - Reagent Water	M22-My0061175	X		X	
30	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - Reagent Water	M22-My0061176	X		X	
31	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - Reagent Water	M22-My0061177	X		X	
32	SX_IB_20220525_14_58_SS_Triplicate_EU	May 25, 2022	2:58PM	AUS Leachate - Reagent Water	M22-My0061178	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail		AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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					
F					
Test Counts		20	10	32	10

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1			1	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1			1	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 1			1	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 5			5	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/kg	< 5		5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5		5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5		5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5		5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5		5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5		5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5		5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5		5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5		5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5		5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5		5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5		5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5		5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5		5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5		5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10		10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10		10	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5		5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5		5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5		5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5		5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5		5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5		5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5		5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5		5	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10		10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5		5	Pass	
LCS - % Recovery						
Total Recoverable Hydrocarbons						
TRH C6-C9	%	82		70-130	Pass	
TRH C10-C14	%	116		70-130	Pass	
Naphthalene	%	77		70-130	Pass	
TRH C6-C10	%	82		70-130	Pass	
TRH >C10-C16	%	123		70-130	Pass	
LCS - % Recovery						
Volatile Organics						
1.1-Dichloroethene	%	81		70-130	Pass	
1.1.1-Trichloroethane	%	87		70-130	Pass	
1.2-Dichlorobenzene	%	86		70-130	Pass	
1.2-Dichloroethane	%	92		70-130	Pass	
Benzene	%	104		70-130	Pass	
Ethylbenzene	%	93		70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	94			70-130	Pass	
Toluene	%	103			70-130	Pass	
Trichloroethene	%	86			70-130	Pass	
Xylenes - Total*	%	95			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	106			70-130	Pass	
Acenaphthylene	%	111			70-130	Pass	
Anthracene	%	104			70-130	Pass	
Benz(a)anthracene	%	78			70-130	Pass	
Benzo(a)pyrene	%	106			70-130	Pass	
Benzo(b&i)fluoranthene	%	73			70-130	Pass	
Benzo(g,h,i)perylene	%	110			70-130	Pass	
Benzo(k)fluoranthene	%	106			70-130	Pass	
Chrysene	%	112			70-130	Pass	
Dibenz(a,h)anthracene	%	105			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	103			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	100			70-130	Pass	
Naphthalene	%	98			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	105			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	90			70-130	Pass	
4,4'-DDD	%	100			70-130	Pass	
4,4'-DDE	%	90			70-130	Pass	
4,4'-DDT	%	84			70-130	Pass	
a-HCH	%	79			70-130	Pass	
Aldrin	%	96			70-130	Pass	
b-HCH	%	84			70-130	Pass	
d-HCH	%	77			70-130	Pass	
Dieldrin	%	81			70-130	Pass	
Endosulfan I	%	80			70-130	Pass	
Endosulfan II	%	89			70-130	Pass	
Endosulfan sulphate	%	74			70-130	Pass	
Endrin	%	72			70-130	Pass	
Endrin aldehyde	%	121			70-130	Pass	
Endrin ketone	%	88			70-130	Pass	
g-HCH (Lindane)	%	97			70-130	Pass	
Heptachlor	%	71			70-130	Pass	
Heptachlor epoxide	%	92			70-130	Pass	
Hexachlorobenzene	%	89			70-130	Pass	
Methoxychlor	%	121			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	98			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	87			25-140	Pass	
2,4-Dichlorophenol	%	100			25-140	Pass	
2,4,5-Trichlorophenol	%	125			25-140	Pass	
2,4,6-Trichlorophenol	%	80			25-140	Pass	
2,6-Dichlorophenol	%	80			25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	93		25-140	Pass	
Pentachlorophenol	%	56		25-140	Pass	
Tetrachlorophenols - Total	%	98		25-140	Pass	
LCS - % Recovery						
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	%	34		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	76		25-140	Pass	
2-Nitrophenol	%	87		25-140	Pass	
2,4-Dimethylphenol	%	54		25-140	Pass	
2,4-Dinitrophenol	%	53		25-140	Pass	
2-Methylphenol (o-Cresol)	%	74		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	97		25-140	Pass	
4-Nitrophenol	%	70		25-140	Pass	
Dinoseb	%	43		25-140	Pass	
Phenol	%	82		25-140	Pass	
LCS - % Recovery						
Chromium (hexavalent)	%	80		70-130	Pass	
Cyanide (total)	%	110		70-130	Pass	
Fluoride (Total)	%	107		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	104		80-120	Pass	
Cadmium	%	115		80-120	Pass	
Chromium	%	110		80-120	Pass	
Copper	%	107		80-120	Pass	
Lead	%	108		80-120	Pass	
Mercury	%	117		80-120	Pass	
Molybdenum	%	106		80-120	Pass	
Nickel	%	105		80-120	Pass	
Selenium	%	106		80-120	Pass	
Silver	%	109		80-120	Pass	
Tin	%	105		80-120	Pass	
Zinc	%	103		80-120	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	104		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	131		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	84		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	83		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	133		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	97		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	134		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	77		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	86		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	60		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	76		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	%	75		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	94		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	84		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	106		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	108		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	96		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	63			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)								
Perfluorobutanesulfonic acid (PFBS)	%	80			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	124			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	109			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	84			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	92			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	91			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	94			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	88			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	85			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	118			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	149			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	128			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C10-C14	M22-My0056045	NCP	%	99		70-130	Pass	
TRH >C10-C16	M22-My0056045	NCP	%	95		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-My0049137	NCP	%	82		70-130	Pass	
Acenaphthylene	M22-My0046457	NCP	%	93		70-130	Pass	
Anthracene	M22-My0046457	NCP	%	104		70-130	Pass	
Benz(a)anthracene	M22-My0046457	NCP	%	86		70-130	Pass	
Benzo(a)pyrene	M22-My0046457	NCP	%	88		70-130	Pass	
Benzo(b&j)fluoranthene	M22-My0046457	NCP	%	94		70-130	Pass	
Benzo(g,h,i)perylene	M22-My0046457	NCP	%	84		70-130	Pass	
Benzo(k)fluoranthene	M22-My0046457	NCP	%	117		70-130	Pass	
Chrysene	M22-My0046457	NCP	%	93		70-130	Pass	
Dibenz(a,h)anthracene	M22-My0046457	NCP	%	85		70-130	Pass	
Fluoranthene	M22-My0046457	NCP	%	87		70-130	Pass	
Fluorene	M22-My0046457	NCP	%	89		70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-My0046457	NCP	%	78		70-130	Pass	
Naphthalene	M22-My0046457	NCP	%	84		70-130	Pass	
Phenanthrene	M22-My0046457	NCP	%	99		70-130	Pass	
Pyrene	M22-My0049137	NCP	%	99		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	M22-My0054826	NCP	%	113		70-130	Pass	
4.4'-DDD	M22-My0054826	NCP	%	84		70-130	Pass	
4.4'-DDE	M22-My0054826	NCP	%	102		70-130	Pass	
4.4'-DDT	M22-My0054826	NCP	%	73		70-130	Pass	
a-HCH	M22-My0054826	NCP	%	74		70-130	Pass	
Aldrin	M22-My0054826	NCP	%	113		70-130	Pass	
b-HCH	M22-My0054826	NCP	%	84		70-130	Pass	
d-HCH	M22-My0054826	NCP	%	89		70-130	Pass	
Dieldrin	M22-My0054826	NCP	%	99		70-130	Pass	
Endosulfan I	M22-My0054826	NCP	%	108		70-130	Pass	
Endosulfan II	M22-My0054826	NCP	%	99		70-130	Pass	
Endosulfan sulphate	M22-My0054826	NCP	%	78		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Endrin	M22-My0054826	NCP	%	71		70-130	Pass	
Endrin aldehyde	M22-My0054826	NCP	%	73		70-130	Pass	
Endrin ketone	M22-My0054826	NCP	%	98		70-130	Pass	
g-HCH (Lindane)	M22-My0054826	NCP	%	80		70-130	Pass	
Heptachlor	M22-My0054826	NCP	%	81		70-130	Pass	
Heptachlor epoxide	M22-My0054826	NCP	%	107		70-130	Pass	
Hexachlorobenzene	M22-My0054826	NCP	%	75		70-130	Pass	
Methoxychlor	M22-My0054826	NCP	%	78		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls				Result 1				
Aroclor-1016	M22-My0049137	NCP	%	88		70-130	Pass	
Aroclor-1260	M22-My0049137	NCP	%	91		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-My0049137	NCP	%	112		30-130	Pass	
2,4-Dichlorophenol	M22-My0046457	NCP	%	84		30-130	Pass	
2,4,5-Trichlorophenol	M22-My0046457	NCP	%	113		30-130	Pass	
2,4,6-Trichlorophenol	M22-My0046457	NCP	%	51		30-130	Pass	
2,6-Dichlorophenol	M22-My0046457	NCP	%	60		30-130	Pass	
4-Chloro-3-methylphenol	M22-My0049137	NCP	%	65		30-130	Pass	
Pentachlorophenol	M22-My0046457	NCP	%	49		30-130	Pass	
Tetrachlorophenols - Total	M22-My0046457	NCP	%	73		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-My0046457	NCP	%	34		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-My0046457	NCP	%	37		30-130	Pass	
2-Nitrophenol	M22-My0046457	NCP	%	61		30-130	Pass	
2,4-Dimethylphenol	M22-My0046457	NCP	%	56		30-130	Pass	
2,4-Dinitrophenol	M22-My0046422	NCP	%	37		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-My0046457	NCP	%	65		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-My0046457	NCP	%	59		30-130	Pass	
4-Nitrophenol	M22-My0046457	NCP	%	61		30-130	Pass	
Dinoseb	M22-My0046457	NCP	%	66		30-130	Pass	
Phenol	M22-My0049137	NCP	%	100		30-130	Pass	
Spike - % Recovery								
				Result 1				
Cyanide (total)	M22-My0060323	NCP	%	77		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-My0060123	NCP	%	86		75-125	Pass	
Cadmium	M22-My0060123	NCP	%	99		75-125	Pass	
Chromium	M22-My0060123	NCP	%	87		75-125	Pass	
Copper	M22-My0060123	NCP	%	96		75-125	Pass	
Lead	M22-My0060123	NCP	%	103		75-125	Pass	
Mercury	M22-My0060123	NCP	%	118		75-125	Pass	
Molybdenum	M22-My0060123	NCP	%	94		75-125	Pass	
Nickel	M22-My0060123	NCP	%	86		75-125	Pass	
Selenium	M22-My0060123	NCP	%	86		75-125	Pass	
Silver	M22-My0060123	NCP	%	94		75-125	Pass	
Tin	M22-My0060123	NCP	%	99		75-125	Pass	
Zinc	M22-My0055874	NCP	%	92		75-125	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCA)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-My0056029	NCP	%	110		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropentanoic acid (PFPeA)	M22-My0056029	NCP	%	78		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0056029	NCP	%	90		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0056029	NCP	%	95		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0056029	NCP	%	124		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0056029	NCP	%	102		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0056029	NCP	%	140		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0056029	NCP	%	125		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0056029	NCP	%	107		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0056029	NCP	%	68		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0056029	NCP	%	72		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-My0056029	NCP	%	76		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0056029	NCP	%	96		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0056029	NCP	%	109		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0056029	NCP	%	132		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0056029	NCP	%	117		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0056029	NCP	%	111		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0056029	NCP	%	58		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-My0056029	NCP	%	90		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0056029	NCP	%	150		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0056029	NCP	%	121		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0056029	NCP	%	97		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0056029	NCP	%	110		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0056029	NCP	%	85		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0056029	NCP	%	91		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0056029	NCP	%	98		50-150	Pass	
Spike - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0056029	NCP	%	94		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0056029	NCP	%	120		50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0056029	NCP	%	91		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0056029	NCP	%	126		50-150	Pass	
Spike - % Recovery								

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-My0061151	CP	%	78			70-130	Pass	
Naphthalene	M22-My0061151	CP	%	93			70-130	Pass	
TRH C6-C10	M22-My0061151	CP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-My0061151	CP	%	86			70-130	Pass	
1.1.1-Trichloroethane	M22-My0061151	CP	%	76			70-130	Pass	
1.2-Dichlorobenzene	M22-My0061151	CP	%	82			70-130	Pass	
1.2-Dichloroethane	M22-My0061151	CP	%	91			70-130	Pass	
Benzene	M22-My0061151	CP	%	82			70-130	Pass	
Ethylbenzene	M22-My0061151	CP	%	94			70-130	Pass	
m&p-Xylenes	M22-My0061151	CP	%	95			70-130	Pass	
o-Xylene	M22-My0061151	CP	%	97			70-130	Pass	
Toluene	M22-My0061151	CP	%	80			70-130	Pass	
Trichloroethene	M22-My0061151	CP	%	92			70-130	Pass	
Xylenes - Total*	M22-My0061151	CP	%	96			70-130	Pass	
Spike - % Recovery									
Fluoride (Total)	M22-My0061155	CP	%	96			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-My0058810	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-My0051916	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-My0051916	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-My0051916	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-My0058810	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-My0051916	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-My0051916	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-My0051916	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
2-Butanone (MEK)	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-My0058810	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1,2-Dichloroethene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1,3-Dichloropropene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-My0058810	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-My0058810	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-My0058810	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-My0058810	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1,2-Dichloroethene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1,3-Dichloropropene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-My0058810	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-My0058810	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4.4'-DDD	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDE	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDT	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-My0046451	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-My0046451	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dichlorophenol	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-Trichlorophenol	M22-My0046451	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2.4.6-Trichlorophenol	M22-My0046451	NCP	mg/kg	< 1	< 1	<1	30%	Pass
4-Chloro-3-methylphenol	M22-My0046451	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-My0046451	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-My0046451	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	M22-My0046451	NCP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	M22-My0046451	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-My0046451	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	M22-My0046451	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-My0046451	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-My0046451	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-My0046451	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-My0046451	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-My0046451	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-My0061622	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	N22-My0056845	NCP	mg/kg	< 5	< 5	<1	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M22-My0056030	NCP	pH Units	4.8	5.0	pass	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0055720	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0055720	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0055720	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecane sulfonic acid (8:2 FTSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecane sulfonic acid (10:2 FTSA)	M22-My0055720	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Heptachlor epoxide	M22-My0051934	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2,6-Dichlorophenol	M22-My0051934	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Fluoride (Total)	M22-My0061152	CP	mg/kg	110	120	6.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-My0061155	CP	mg/kg	23	24	3.0	30%	Pass
Cadmium	M22-My0061155	CP	mg/kg	< 1	< 1	<1	30%	Pass
Chromium	M22-My0061155	CP	mg/kg	110	110	1.0	30%	Pass
Copper	M22-My0061155	CP	mg/kg	55	56	2.0	30%	Pass
Lead	M22-My0061155	CP	mg/kg	< 5	< 5	<1	30%	Pass
Mercury	M22-My0061155	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-My0061155	CP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-My0061155	CP	mg/kg	180	180	2.0	30%	Pass
Selenium	M22-My0061155	CP	mg/kg	< 5	< 5	<1	30%	Pass
Silver	M22-My0061155	CP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-My0061155	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-My0061155	CP	mg/kg	110	100	10	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M22-My0061156	CP	%	28	30	6.0	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
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
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](#).

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

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 **891648-W**
Project name **20220525163202-Eurofin-6**
Project ID **JC0927**
Received Date **May 25, 2022**

Client Sample ID			SX_IB_202205 25_15_02_SB_Blank_EUF	SX_IB_202205 25_15_03_SR_Rinsate_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22-My0061157	M22-My0061158
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	95	92
13C5-PFPeA (surr.)	1	%	99	96
13C5-PFHxA (surr.)	1	%	95	93
13C4-PFHpA (surr.)	1	%	81	96
13C8-PFOA (surr.)	1	%	81	97
13C5-PFNA (surr.)	1	%	83	83
13C6-PFDA (surr.)	1	%	52	142
13C2-PFUnDA (surr.)	1	%	77	74
13C2-PFDoDA (surr.)	1	%	88	94
13C2-PFTeDA (surr.)	1	%	68	81
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	112	92

Client Sample ID			SX_IB_202205 25_15_02_SB_Blank_EUF	SX_IB_202205 25_15_03_SR_Rinsate_EUF
Sample Matrix			Water	Water
Eurofins Sample No.			M22-My0061157	M22-My0061158
Date Sampled			May 25, 2022	May 25, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D3-N-MeFOSA (surr.)	1	%	98	146
D5-N-EtFOSA (surr.)	1	%	91	127
D7-N-MeFOSE (surr.)	1	%	77	92
D9-N-EtFOSE (surr.)	1	%	100	102
D5-N-EtFOSAA (surr.)	1	%	78	92
D3-N-MeFOSAA (surr.)	1	%	103	65
Perfluoroalkyl sulfonic acids (PFASs)				
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	112
18O2-PFHxS (surr.)	1	%	70	73
13C8-PFOS (surr.)	1	%	85	103
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	90	84
13C2-6:2 FTSA (surr.)	1	%	19	78
13C2-8:2 FTSA (surr.)	1	%	90	95
13C2-10:2 FTSA (surr.)	1	%	111	92
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	May 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)			

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	Soil	M22-My0061147		X	X	X
2	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	Soil	M22-My0061148		X	X	X
3	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	Soil	M22-My0061149		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220525_14_14_S_S_Primary_EU_F	May 25, 2022	2:14PM	Soil	M22-My0061150		X	X	X
5	SX_OB_20220525_14_17_S_S_Primary_EU_F	May 25, 2022	2:17PM	Soil	M22-My0061151		X	X	X
6	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	Soil	M22-My0061152		X	X	X
7	SX_OB_20220525_14_31_S	May 25, 2022	2:31PM	Soil	M22-My0061153		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF								
8	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	Soil	M22-My0061154		X	X	X
9	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	Soil	M22-My0061155		X	X	X
10	SX_IB_20220525_14_58_SS_Triplicate_EUF	May 25, 2022	2:58PM	Soil	M22-My0061156		X	X	X
11	SX_IB_202205	May 25, 2022	3:02PM	Water	M22-			X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	25_15_02_SB _Blank_EUF				My0061157				
12	SX_IB_202205 25_15_03_SR _Rinsate_EUF	May 25, 2022	3:03PM	Water	M22- My0061158			X	
13	SX_OB_20220 525_13_53_S S_Primary_EU F	May 25, 2022	1:53PM	AUS Leachate - pH 5.0	M22- My0061159	X		X	
14	SX_OB_20220 525_13_57_S S_Primary_EU F	May 25, 2022	1:57PM	AUS Leachate - pH 5.0	M22- My0061160	X		X	
15	SX_OB_20220	May 25, 2022	2:06PM	AUS Leachate	M22-	X		X	

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

Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 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									
15	SX_OB_20220525_14_06_S_S_Triplicate_EUF	May 25, 2022	2:06PM	AUS Leachate - pH 5.0	M22-My0061161				
16	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - pH 5.0	M22-My0061162	X		X	
17	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - pH 5.0	M22-My0061163	X		X	
18	SX_OB_20220525_14_19_S	May 25, 2022	2:19PM	AUS Leachate - pH 5.0	M22-My0061164	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Duplicate_EUF								
19	SX_OB_20220525_14_31_S_S_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - pH 5.0	M22-My0061165	X		X	
20	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - pH 5.0	M22-My0061166	X		X	
21	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - pH 5.0	M22-My0061167	X		X	
22	SX_IB_202205	May 25, 2022	2:58PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
22	SX_IB_20220525_14_58_SS_Triplicate_EU_F	May 25, 2022	2:58PM	AUS Leachate - pH 5.0	M22-My0061168				
23	SX_OB_20220525_13_53_S_S_Primary_EU_F	May 25, 2022	1:53PM	AUS Leachate - Reagent Water	M22-My0061169	X		X	
24	SX_OB_20220525_13_57_S_S_Primary_EU_F	May 25, 2022	1:57PM	AUS Leachate - Reagent Water	M22-My0061170	X		X	
25	SX_OB_20220525_14_06_S	May 25, 2022	2:06PM	AUS Leachate - Reagent	M22-My0061171	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF			Water					
26	SX_OB_20220525_14_14_S_S_Primary_EUF	May 25, 2022	2:14PM	AUS Leachate - Reagent Water	M22-My0061172	X		X	
27	SX_OB_20220525_14_17_S_S_Primary_EUF	May 25, 2022	2:17PM	AUS Leachate - Reagent Water	M22-My0061173	X		X	
28	SX_OB_20220525_14_19_S_S_Duplicate_EUF	May 25, 2022	2:19PM	AUS Leachate - Reagent Water	M22-My0061174	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220525163202-Eurofin-6
Project ID: JC0927

Order No.:
Report #: 891648
Phone: 08 8338 1009
Fax:

Received: May 25, 2022 5:20 PM
Due: May 27, 2022
Priority: 2 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									
29	SX_OB_20220525_14_31_SS_Triplicate_EUF	May 25, 2022	2:31PM	AUS Leachate - Reagent Water	M22-My0061175	X		X	
30	SX_IB_20220525_14_42_SS_Primary_EUF	May 25, 2022	2:42PM	AUS Leachate - Reagent Water	M22-My0061176	X		X	
31	SX_IB_20220525_14_46_SS_Duplicate_EUF	May 25, 2022	2:46PM	AUS Leachate - Reagent Water	M22-My0061177	X		X	
32	SX_IB_20220525_14_58_SS_Triplicate_EUF	May 25, 2022	2:58PM	AUS Leachate - Reagent Water	M22-My0061178	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	May 25, 2022 5:20 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	891648	Due:	May 27, 2022
Project Name:	20220525163202-Eurofin-6	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail		AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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					
F					
Test Counts		20	10	32	10

Internal Quality Control Review and Glossary
General

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

Holding Times

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

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

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

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

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

Units

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

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

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

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	115		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	71		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	74		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	79		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	114		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	79		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	113		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	105		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	127		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	92		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	99		50-150	Pass	
LCS - % Recovery						

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	85			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	80			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	106			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	75			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	66			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	96			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	78			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)								
Perfluorobutanesulfonic acid (PFBS)	%	60			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	112			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	86			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	81			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	87			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	86			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	78			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	89			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	77			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	122			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	107			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	71			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCA)								
Perfluorobutanoic acid (PFBA)	M22-My0061158	CP	%	80		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0061158	CP	%	71		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0061158	CP	%	72		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0061158	CP	%	88		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0061158	CP	%	84		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-My0061158	CP	%	68		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0061158	CP	%	109		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0061158	CP	%	116		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0061158	CP	%	114		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-My0061158	CP	%	82		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-My0061158	CP	%	91		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	M22-My0061158	CP	%	72		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0061158	CP	%	69		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0061158	CP	%	96		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0061158	CP	%	79		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0061158	CP	%	63		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-My0061158	CP	%	80			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0061158	CP	%	70			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-My0061158	CP	%	59			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-My0061158	CP	%	100			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-My0061158	CP	%	78			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-My0061158	CP	%	83			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-My0061158	CP	%	65			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0061158	CP	%	73			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-My0061158	CP	%	74			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-My0061158	CP	%	75			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-My0061158	CP	%	76			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0061158	CP	%	78			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0061158	CP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0061158	CP	%	136			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTEDA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-My0061157	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-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-My0061157	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-My0061157	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

CHAIN OF CUSTODY DOCUMENTATION



Australian Laboratory Services Pty Ltd

CLIENT: Agon Environmental
 ADDRESS / OFFICE: Melbourne
 PROJECT MANAGER (PM): Craig Timbur
 PROJECT ID: JC0927
 SITE: 20220517042413.ALS-12
 RESULTS REQUIRED (Date): 5 days
 P.O. NO.:
 QUOTE NO.: ME-150-19 WQTP

SAMPLER: Brandon and Toby
 - Agon
 MOBILE 1: +61 400 828 907 (Craig Timbur)
 MOBILE 2: +61 490 411 004 (David Lawson)
 EMAIL REPORT TO: Labreports.TS1@agonenviro.com.au agonenviro.com.au agonenviro.melb@gsdcl.com.au
 motherhublabresults1@wslc.com.au
 EMAIL INVOICE TO: (if different to report) Labreports.TS1@agonenviro.com.au agonenviro.melb@gsdcl.com.au
 ANALYSIS REQUIRED INCLUDING SUITES (note - suite codes must be listed to attract suite prices)

SAMPLE INFORMATION (note: S = Soil, W=Water)		CONTAINER INFORMATION		ANALYSIS REQUIRED INCLUDING SUITES (note - suite codes must be listed to attract suite prices)				Notes:
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles		
1	SX_IB_20220516_08_05_SS_Primary_ALS	S	16/05/2022	08:05	Bucket	1	X	X
2	SX_IB_20220516_08_06_SS_Duplicate_ALS	S	16/05/2022	08:06	Bucket	1	X	X
3	SX_OB_20220516_08_19_SS_Primary_ALS	S	16/05/2022	08:07	Bucket	1	X	X
4	SX_IB_20220516_08_54_SIR_Please_ALS	W	16/05/2022	08:54	Bottle	1	X	
5	SX_IB_20220516_08_58_SIR_Blank_ALS	W	16/05/2022	08:56	Bottle	1	X	
6	SX_OB_20220516_12_10_SS_Primary_ALS	S	16/05/2022	12:10	Bucket	1	X	X
7	SX_IB_20220516_16_12_SS_Primary_ALS	S	16/05/2022	16:12	Bucket	1	X	X
8	SX_IB_20220516_16_08_SS_Primary_ALS	S	16/05/2022	16:08	Bucket	1	X	X
9	SX_OB_20220516_17_40_SS_Triplicate_ALS	S	16/05/2022	17:40	Bucket	1	X	X
10	SX_IB_20220516_20_04_SS_Primary_ALS	S	16/05/2022	20:04	Bucket	1	X	X
11	SX_IB_20220516_20_10_SS_Triplicate_ALS	S	16/05/2022	20:10	Bucket	1	X	X
12	SX_IB_20220517_00_01_SS_Primary_ALS	S	17/05/2022	00:01	Bucket	1	X	X
13	SX_IB_20220517_04_05_SS_Primary_ALS	S	17/05/2022	4:05	Bucket	1	X	X

BELOUNCHED BY: Kenrick RECEIVED BY: Kevin
 Name: Kenrick Date: 17/5/22 Name: Kevin Date: 17/5/22
 Name: Kenrick Date: 17/5/22 Name: Kevin Date: 17/5/22
 Name: Kenrick Date: 17/5/22 Name: Kevin Date: 17/5/22

Water/Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; OHC = Nitric Preserved ORC; 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

Environmental Division
 Melbourne
 Work Order Reference
EM2209011
 Telephone : + 61-3-8549 9600

CERTIFICATE OF ANALYSIS

Work Order : **EM2209011**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : DAVID LAWSON
Address : D1.1 63-85 TURNER STREET
 PORT MELBOURNE 3207

Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220517042413-ALS-12
Sampler : ----
Site : 20220517042413-ALS-12
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 24
No. of samples analysed : 24

Page : 1 of 40
Laboratory : Environmental Division Melbourne
Contact : Josh Alexander
Address : 4 Westall Rd Springvale VIC Australia 3171

Telephone : +61-3-8549 9600
Date Samples Received : 17-May-2022 10:45
Date Analysis Commenced : 18-May-2022
Issue Date : 24-May-2022 16:51



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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

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



General Comments

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

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

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

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

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

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

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231X: Poor matrix spike recovery for sample EM2209011-002 due to sample matrix interference.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- 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_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	108	103	104	87.5	99.6
13C8-PFOA	----	0.02	%	97.0	96.5	93.9	94.4	106



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	91.3	102	107	96.7	99.4
13C8-PFOA	----	0.02	%	107	98.3	104	97.9	105



Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)		Sample ID		SX_IB_20220517_04_05_SS_Primary_ALS	----	----	----	----
Sampling date / time		17-May-2022 04:05		----	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209011-013	-----	-----	-----	-----
				Result	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	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_IB_20220517_04_
 05_SS_Primary_ALS

				Sampling date / time				
Compound	CAS Number	LOR	Unit					
				17-May-2022 04:05	----	----	----	----
				EM2209011-013	-----	-----	-----	-----
				Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	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	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	98.4	----	----	----	----
13C8-PFOA	----	0.02	%	98.0	----	----	----	----



Analytical Results

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

Sample ID

				SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017	EM2209011-018
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017	EM2209011-018
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	90.6	106	106	95.7	104
13C8-PFOA	----	0.02	%	101	100	101	101	95.9



Analytical Results

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

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-019	EM2209011-020	EM2209011-021	EM2209011-022	EM2209011-023
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

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

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-019	EM2209011-020	EM2209011-021	EM2209011-022	EM2209011-023
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	107	98.2	103	112	98.7
13C8-PFOA	----	0.02	%	95.1	101	102	99.8	95.0



Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)		Sample ID		SX_IB_20220517_04_05_SS_Primary_ALS	----	----	----	----
Sampling date / time		17-May-2022 04:05		----	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2209011-024	-----	-----	-----	-----
				Result	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	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_IB_20220517_04_05_SS_Primary_ALS

				Sampling date / time				
Compound	CAS Number	LOR	Unit					
				17-May-2022 04:05	----	----	----	----
				EM2209011-024	-----	-----	-----	-----
				Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
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	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	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	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.3	----	----	----	----
13C8-PFOA	----	0.02	%	99.0	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12	
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007	
				Result	Result	Result	Result	Result	
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit	7.9	7.9	8.0	7.9	7.8	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	27.5	28.5	32.8	35.2	31.5	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	33	46	38	27	43	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	5	mg/kg	98	110	92	100	104	
Copper	7440-50-8	5	mg/kg	54	59	64	61	53	
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	134	170	164	156	155	
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	90	110	106	103	101	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5	
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg	150	130	130	130	120	
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit	8.0	8.3	7.2	7.3	7.6	
After HCl pH	----	0.1	pH Unit	1.4	1.5	1.2	1.3	1.3	
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0	
Final pH	----	0.1	pH Unit	5.1	5.1	5.1	5.1	5.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
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
[^] Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
[^] Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
[^] Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
[^] Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ 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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS	
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12		
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007		
				Result	Result	Result	Result	Result		
EP075I: Organochlorine Pesticides - Continued										
^ Sum of other organochlorine pesticides				----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction				----	20	mg/kg	<20	<20	<20	<20
C10 - C14 Fraction				----	50	mg/kg	<50	<50	<50	<50
C6 - C10 Fraction				C6_C10	20	mg/kg	<20	<20	<20	<20
C15 - C28 Fraction				----	100	mg/kg	<100	<100	<100	<100
C29 - C36 Fraction				----	100	mg/kg	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)				----	50	mg/kg	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions										
>C10 - C16 Fraction				----	50	mg/kg	<50	<50	<50	<50
>C16 - C34 Fraction				----	100	mg/kg	<100	<100	<100	<100
>C34 - C40 Fraction				----	100	mg/kg	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)				----	50	mg/kg	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)				----	50	mg/kg	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)				C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids										
Perfluorobutane sulfonic acid (PFBS)				375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)				2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)				355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)				375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)				1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)				335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
EP231B: Perfluoroalkyl Carboxylic Acids										
Perfluorobutanoic acid (PFBA)				375-22-4	5	µg/kg	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)				2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)				307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)				375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12	
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS	SX_IB_20220516_16_12_SS_Primary_ALS
Sampling date / time				16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12	
Compound	CAS Number	LOR	Unit	EM2209011-001	EM2209011-002	EM2209011-003	EM2209011-006	EM2209011-007	
				Result	Result	Result	Result	Result	
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
EP231P: PFAS Sums									
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	104	97.5	102	99.6	104	
EP074S: VOC Surrogates (Ultra-Trace)									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	97.9	101	96.0	99.1	90.0	
Toluene-D8	2037-26-5	0.1	%	95.3	97.5	89.0	94.0	86.2	
4-Bromofluorobenzene	460-00-4	0.1	%	107	112	102	109	98.8	
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%	103	97.6	97.9	97.2	84.7	
2-Chlorophenol-D4	93951-73-6	0.025	%	98.5	93.8	94.3	92.7	81.1	
2,4,6-Tribromophenol	118-79-6	0.025	%	97.9	93.4	95.6	93.2	81.0	
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%	100	97.9	99.1	94.5	85.1	
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	98.5	93.4	94.2	91.6	81.0	
2-Fluorobiphenyl	321-60-8	0.025	%	106	100	101	99.0	87.6	
Anthracene-d10	1719-06-8	0.025	%	105	100	101	97.9	87.2	
4-Terphenyl-d14	1718-51-0	0.025	%	107	102	103	99.7	88.9	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	88.7	104	106	104	102	
13C8-PFOA	----	0.0002	%	104	96.8	96.5	100	103	



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl ₂)	----	0.1	pH Unit	8.2	8.0	7.8	8.0	7.8
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	25.8	31.9	31.2	33.5	33.7
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	37	23	34	23	29
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	102	94	106	96	116
Copper	7440-50-8	5	mg/kg	61	72	56	57	48
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	148	193	158	152	148
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	115	90	100	98
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	160	140	110	140	120
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	7.7	7.6	7.7	7.2	7.2
After HCl pH	----	0.1	pH Unit	1.3	1.3	1.2	1.4	1.6
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.1	5.0	5.0	5.0	5.2
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220517_00_01_SS_Primary_ALS
Sampling date / time				16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
Compound	CAS Number	LOR	Unit	EM2209011-008	EM2209011-009	EM2209011-010	EM2209011-011	EM2209011-012
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	104	102	102	105	105
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	89.1	96.3	101	80.0	105
Toluene-D8	2037-26-5	0.1	%	85.8	86.0	98.7	74.0	96.7
4-Bromofluorobenzene	460-00-4	0.1	%	98.6	104	116	89.4	113
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	104	101	99.5	103	99.8
2-Chlorophenol-D4	93951-73-6	0.025	%	99.8	96.4	95.4	98.7	96.0
2,4,6-Tribromophenol	118-79-6	0.025	%	100	96.6	97.1	98.1	97.0
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	104	101	98.9	102	98.0
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	98.0	95.8	93.3	97.0	94.2
2-Fluorobiphenyl	321-60-8	0.025	%	106	104	102	105	102
Anthracene-d10	1719-06-8	0.025	%	105	103	101	105	102
4-Terphenyl-d14	1718-51-0	0.025	%	107	105	105	107	105
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	101	106	105	102	96.6
13C8-PFOA	----	0.0002	%	96.2	99.6	102	100	110



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Sample ID			SX_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
		Sampling date / time			17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017	
				Result	Result	Result	Result	Result	
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit	7.8	----	----	----	----	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	31.8	----	----	----	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	30	----	----	----	----	
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----	
Chromium	7440-47-3	5	mg/kg	112	----	----	----	----	
Copper	7440-50-8	5	mg/kg	68	----	----	----	----	
Lead	7439-92-1	5	mg/kg	<5	----	----	----	----	
Molybdenum	7439-98-7	5	mg/kg	<5	----	----	----	----	
Nickel	7440-02-0	5	mg/kg	200	----	----	----	----	
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	128	----	----	----	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----	
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg	1.1	----	----	----	----	
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg	<5	----	----	----	----	
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg	130	----	----	----	----	
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit	8.3	----	----	----	----	
After HCl pH	----	0.1	pH Unit	1.5	----	----	----	----	
Extraction Fluid pH	----	0.1	pH Unit	5.0	----	----	----	----	
Final pH	----	0.1	pH Unit	5.0	----	----	----	----	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit	----	7.0	9.4	9.0	9.0	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----	
EP074A: Monocyclic Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
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	----	----	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP074I: Volatile Halogenated Compounds								
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	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
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	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
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	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
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_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	----	----	----	----
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	0.6	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	----	----
EP075I: Organochlorine Pesticides								
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_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017	
				Result	Result	Result	Result	Result	
EP075I: Organochlorine Pesticides - Continued									
^ 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	----	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
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	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>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	----	----	----	----	
EP231A: Perfluoroalkyl Sulfonic Acids									
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	----	----	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	----	----	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
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	----	----	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
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	----	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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_IB_20220517_04_05_SS_Primary_ALS	SX_IB_20220516_08_05_SS_Primary_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS	SX_OB_20220516_08_15_SS_Primary_ALS	SX_OB_20220516_12_10_SS_Primary_ALS
Sampling date / time				17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
Compound	CAS Number	LOR	Unit	EM2209011-013	EM2209011-014	EM2209011-015	EM2209011-016	EM2209011-017
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	----	----	----	----
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	----	----	----	----
EP231P: PFAS Sums								
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	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	99.9	----	----	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	90.6	----	----	----	----
Toluene-D8	2037-26-5	0.1	%	85.2	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	97.8	----	----	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	96.6	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	92.9	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.025	%	92.6	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	96.9	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	91.5	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	99.5	----	----	----	----
Anthracene-d10	1719-06-8	0.025	%	99.0	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	102	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	92.2	----	----	----	----
13C8-PFOA	----	0.0002	%	91.6	----	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_IB_20220516_16_12_SS_Primary_ALS	SX_IB_20220516_16_08_SS_Primary_ALS	SX_OB_20220516_17_40_SS_Triplicate_ALS	SX_IB_20220516_20_04_SS_Primary_ALS	SX_OB_20220516_20_10_SS_Triplicate_ALS
Sampling date / time				16-May-2022 16:12	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10
Compound	CAS Number	LOR	Unit	EM2209011-018	EM2209011-019	EM2209011-020	EM2209011-021	EM2209011-022
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	8.8	9.7	9.1	8.9	9.2



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220517_00_01_SS_Primary_ALS	SX_IB_20220517_04_05_SS_Primary_ALS	----	----	----
Sampling date / time				17-May-2022 00:01	17-May-2022 04:05	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209011-023	EM2209011-024	-----	-----	-----	
				Result	Result	---	---	---	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit	9.0	9.0	----	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		SX_IB_20220516_08_54_SR_Rinsate_ALS	SX_IB_20220516_08_56_SB_Blank_ALS	----	----	----
Sampling date / time			16-May-2022 08:54		16-May-2022 08:56		----	----	----
Compound	CAS Number	LOR	Unit	EM2209011-004	EM2209011-005	-----	-----	-----	
				Result	Result	---	---	---	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.10	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	----	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
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_IB_20220516_08_54_SR_Rinsate_ALS	SX_IB_20220516_08_56_SB_Blank_ALS	----	----	----
Sampling date / time				16-May-2022 08:54	16-May-2022 08:56	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209011-004	EM2209011-005	-----	-----	-----	
				Result	Result	---	---	---	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
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	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	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	----	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	97.4	101	----	----	----	
13C8-PFOA	----	0.02	%	106	111	----	----	----	



Surrogate Control Limits

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

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

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1,2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

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

Automated Guideline Comparison Report

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

Work Order	: EM2209011	Page	: 1 of 33
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: david.lawson@agonenviro.com.au	E-mail	: Josh.Alexander@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 17-May-2022 10:45
Order number	: ----	Date Analysed	: 18-May-2022
C-O-C number	: 20220517042413-ALS-12	Date Issued	: 24-May-2022 16:51
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_20220516_08_05_S S_Primary_ALS	EM2209011-001	Arsenic	EG005T	5	< 20 mg/kg	33 mg/kg
SX_IB_20220516_08_05_S S_Primary_ALS	EM2209011-001	Nickel	EG005T	5	< 60 mg/kg	134 mg/kg
SX_IB_20220516_08_06_S S_Duplicate_ALS	EM2209011-002	Arsenic	EG005T	5	< 20 mg/kg	46 mg/kg
SX_IB_20220516_08_06_S S_Duplicate_ALS	EM2209011-002	Nickel	EG005T	5	< 60 mg/kg	170 mg/kg
SX_OB_20220516_08_15_ SS_Primary_ALS	EM2209011-003	Arsenic	EG005T	5	< 20 mg/kg	38 mg/kg
SX_OB_20220516_08_15_ SS_Primary_ALS	EM2209011-003	Nickel	EG005T	5	< 60 mg/kg	164 mg/kg
SX_OB_20220516_12_10_ SS_Primary_ALS	EM2209011-006	Arsenic	EG005T	5	< 20 mg/kg	27 mg/kg
SX_OB_20220516_12_10_ SS_Primary_ALS	EM2209011-006	Nickel	EG005T	5	< 60 mg/kg	156 mg/kg
SX_IB_20220516_16_12_S S_Primary_ALS	EM2209011-007	Arsenic	EG005T	5	< 20 mg/kg	43 mg/kg
SX_IB_20220516_16_12_S S_Primary_ALS	EM2209011-007	Nickel	EG005T	5	< 60 mg/kg	155 mg/kg
SX_IB_20220516_16_08_S S_Primary_ALS	EM2209011-008	Arsenic	EG005T	5	< 20 mg/kg	37 mg/kg
SX_IB_20220516_16_08_S S_Primary_ALS	EM2209011-008	Nickel	EG005T	5	< 60 mg/kg	148 mg/kg
SX_OB_20220516_17_40_ SS_Triplicate_ALS	EM2209011-009	Arsenic	EG005T	5	< 20 mg/kg	23 mg/kg
SX_OB_20220516_17_40_ SS_Triplicate_ALS	EM2209011-009	Nickel	EG005T	5	< 60 mg/kg	193 mg/kg
SX_IB_20220516_20_04_S S_Primary_ALS	EM2209011-010	Arsenic	EG005T	5	< 20 mg/kg	34 mg/kg
SX_IB_20220516_20_04_S S_Primary_ALS	EM2209011-010	Nickel	EG005T	5	< 60 mg/kg	158 mg/kg
SX_OB_20220516_20_10_ SS_Triplicate_ALS	EM2209011-011	Arsenic	EG005T	5	< 20 mg/kg	23 mg/kg
SX_OB_20220516_20_10_ SS_Triplicate_ALS	EM2209011-011	Nickel	EG005T	5	< 60 mg/kg	152 mg/kg
SX_IB_20220517_00_01_S S_Primary_ALS	EM2209011-012	Arsenic	EG005T	5	< 20 mg/kg	29 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_20220517_00_01_S S_Primary_ALS	EM2209011-012	Nickel	EG005T	5	< 60 mg/kg	148 mg/kg
SX_IB_20220517_04_05_S S_Primary_ALS	EM2209011-013	Arsenic	EG005T	5	< 20 mg/kg	30 mg/kg
SX_IB_20220517_04_05_S S_Primary_ALS	EM2209011-013	Nickel	EG005T	5	< 60 mg/kg	200 mg/kg
SX_IB_20220517_04_05_S S_Primary_ALS	EM2209011-013	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.1 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		SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S	SX_IB_20220 516_16_12_S S_Primary_AL S	
				Sampling date/time	Guideline						Guideline
				Lower Limit	Upper Limit						
						16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12	
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU	
EA001: pH in soil using 0.01M CaCl2 extract											
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.9 ± 0.1	7.9 ± 0.1	8.0 ± 0.1	7.9 ± 0.1	7.8 ± 0.1	
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg	----	2000	33 ± 4	46 ± 6	38 ± 5	27 ± 4	43 ± 6	
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..	
Copper	EG005T	5	mg/kg	----	20000	54 ± 6	59 ± 7	64 ± 8	61 ± 7	53 ± 6	
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	134 ± 13	170 ± 17	164 ± 16	156 ± 15	155 ± 15	
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	90 ± 10	110 ± 12	106 ± 12	103 ± 11	101 ± 11	
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg	----	40000	150 ± 40	130 ± 30	130 ± 30	130 ± 30	120 ± 30	
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
EP074I: Volatile Halogenated Compounds											
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	



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_IB_20220
				Guideline	Guideline	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S	516_16_12_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Lower Limit	Upper Limit	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S	516_16_12_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Guideline	Guideline	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	7.9 ± 0.1	8.0 ± 0.1	7.9 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	33 ± 4	46 ± 6	38 ± 5	27 ± 4	43 ± 6
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	54 ± 6	59 ± 7	64 ± 8	61 ± 7	53 ± 6
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	134 ± 13	170 ± 17	164 ± 16	156 ± 15	155 ± 15
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	90 ± 10	110 ± 12	106 ± 12	103 ± 11	101 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	10000	150 ± 40	130 ± 30	130 ± 30	130 ± 30	120 ± 30
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S	516_16_12_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Lower Limit	Upper Limit	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S	516_16_12_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
						16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.9 ± 0.1	7.9 ± 0.1	8.0 ± 0.1	7.9 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	33 ± 4	46 ± 6	38 ± 5	27 ± 4	43 ± 6
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	54 ± 6	59 ± 7	64 ± 8	61 ± 7	53 ± 6
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	134 ± 13	170 ± 17	164 ± 16	156 ± 15	155 ± 15
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	90 ± 10	110 ± 12	106 ± 12	103 ± 11	101 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	450	150 ± 40	130 ± 30	130 ± 30	130 ± 30	120 ± 30
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S	516_16_12_S
						S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	16-May-2022 16:12
						EM2209011-001 MU	EM2209011-002 MU	EM2209011-003 MU	EM2209011-006 MU	EM2209011-007 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	516_16_08_S	516_17_40_S	516_20_04_S	516_20_10_S	517_00_01_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	8.2 ± 0.1	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	37 ± 5	23 ± 3	34 ± 5	23 ± 3	29 ± 4
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	20000	61 ± 7	72 ± 9	56 ± 7	57 ± 7	48 ± 6
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	148 ± 14	193 ± 19	158 ± 15	152 ± 15	148 ± 14
Selenium	EG005T	5	mg/kg	----	200	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	720	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Zinc	EG005T	5	mg/kg	----	140000	96 ± 11	115 ± 12	90 ± 10	100 ± 11	98 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	40000	160 ± 40	140 ± 30	110 ± 30	140 ± 40	120 ± 30
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	516_16_08_S	516_17_40_S	516_20_04_S	516_20_10_S	517_00_01_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220
				Sampling date/time		516_16_08_S	516_17_40_S	516_20_04_S	516_20_10_S	517_00_01_S
				Lower Limit	Upper Limit	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
						16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.2 ± 0.1	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	37 ± 5	23 ± 3	34 ± 5	23 ± 3	29 ± 4
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	61 ± 7	72 ± 9	56 ± 7	57 ± 7	48 ± 6
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	148 ± 14	193 ± 19	158 ± 15	152 ± 15	148 ± 14
Selenium	EG005T	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
Silver	EG005T	2	mg/kg	----	180	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..
Tin	EG005T	10	mg/kg	----	500	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..
Zinc	EG005T	5	mg/kg	----	35000	96 ± 11	115 ± 12	90 ± 10	100 ± 11	98 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	10000	160 ± 40	140 ± 30	110 ± 30	140 ± 40	120 ± 30
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 516_16_08_S S_Primary_AL S	SX_OB_20220 516_17_40_S S_Triplicate_ ALS	SX_IB_20220 516_20_04_S S_Primary_AL S	SX_OB_20220 516_20_10_S S_Triplicate_ ALS	SX_IB_20220 517_00_01_S S_Primary_AL S
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220	
				Sampling date/time	Guideline	Guideline	516_16_08_S	516_17_40_S	516_20_04_S	516_20_10_S	517_00_01_S
							S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01	
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU	
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.2 ± 0.1	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	7.8 ± 0.1	
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg	----	20	37 ± 5	23 ± 3	34 ± 5	23 ± 3	29 ± 4	
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..	
Copper	EG005T	5	mg/kg	----	100	61 ± 7	72 ± 9	56 ± 7	57 ± 7	48 ± 6	
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	148 ± 14	193 ± 19	158 ± 15	152 ± 15	148 ± 14	
Selenium	EG005T	5	mg/kg	----	10	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
Silver	EG005T	2	mg/kg	----	10	<2 ..	<2 ..	<2 ..	<2 ..	<2 ..	
Tin	EG005T	10	mg/kg	----	50	<10 ..	<10 ..	<10 ..	<10 ..	<10 ..	
Zinc	EG005T	5	mg/kg	----	200	96 ± 11	115 ± 12	90 ± 10	100 ± 11	98 ± 11	
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..	
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg	----	450	160 ± 40	140 ± 30	110 ± 30	140 ± 40	120 ± 30	
EP066: Polychlorinated Biphenyls (PCB)											
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	
EP074I: Volatile Halogenated Compounds											
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	
EP075A: Phenolic Compounds (Non-halogenated)											



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_OB_20220	SX_IB_20220	SX_OB_20220	SX_IB_20220
				Guideline	Guideline	516_16_08_S	516_17_40_S	516_20_04_S	516_20_10_S	517_00_01_S
						S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10	17-May-2022 00:01
						EM2209011-008 MU	EM2209011-009 MU	EM2209011-010 MU	EM2209011-011 MU	EM2209011-012 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220	SX_IB_20220	SX_IB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	517_04_05_S	516_08_05_S	516_08_06_S	516_08_15_S	516_12_10_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Primary_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	7.8 ± 0.1	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	30 ± 4	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	400	<1 --	----	----	----	----
Copper	EG005T	5	mg/kg	----	20000	68 ± 8	----	----	----	----
Lead	EG005T	5	mg/kg	----	6000	<5 --	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	4000	<5 --	----	----	----	----
Nickel	EG005T	5	mg/kg	----	12000	200 ± 20	----	----	----	----
Selenium	EG005T	5	mg/kg	----	200	<5 --	----	----	----	----
Silver	EG005T	2	mg/kg	----	720	<2 --	----	----	----	----
Zinc	EG005T	5	mg/kg	----	140000	128 ± 14	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 --	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	1.1 ± 0.2	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 --	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	40000	130 ± 30	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
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 --	----	----	----	----
EP074I: Volatile Halogenated Compounds										
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 --	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 --	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 --	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 517_04_05_S S_Primary_AL S	SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S	
				Sampling date/time	Guideline						Guideline
				Lower Limit	Upper Limit						
						17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU	
EP075B: Polynuclear Aromatic Hydrocarbons - Continued											
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	--	----	----	----	
EP075I: Organochlorine Pesticides											
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	--	----	----	----	
EP080/071: Total Petroleum Hydrocarbons											
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_IB_20220 517_04_05_S S_Primary_AL S	SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S	
				Sampling date/time	Guideline						Guideline
				Lower Limit	Upper Limit						
						17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU	
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ± 0.1	----	----	----	----	
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg	----	500	30 ± 4	----	----	----	----	
Cadmium	EG005T	1	mg/kg	----	100	<1 --	----	----	----	----	
Copper	EG005T	5	mg/kg	----	5000	68 ± 8	----	----	----	----	
Lead	EG005T	5	mg/kg	----	1500	<5 --	----	----	----	----	
Molybdenum	EG005T	5	mg/kg	----	1000	<5 --	----	----	----	----	
Nickel	EG005T	5	mg/kg	----	3000	200 ± 20	----	----	----	----	
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	128 ± 14	----	----	----	----	
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 --	----	----	----	----	
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	1.1 ± 0.2	----	----	----	----	
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 --	----	----	----	----	
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg	----	10000	130 ± 30	----	----	----	----	
EP074A: Monocyclic Aromatic Hydrocarbons											
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 --	----	----	----	----	
EP074I: Volatile Halogenated Compounds											
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 --	----	----	----	----	
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 --	----	----	----	----	
EP075A: Phenolic Compounds (Non-halogenated)											
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_IB_20220 517_04_05_S S_Primary_AL S	SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU
EP075B: Polynuclear Aromatic Hydrocarbons										
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	--	----	----	----
EP075I: Organochlorine Pesticides										
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	--	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
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_IB_20220 517_04_05_S S_Primary_AL S	SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S	
				Sampling date/time	Guideline						Guideline
				Lower Limit	Upper Limit						
						17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10	
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU	
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.8 ± 0.1	----	----	----	----	
EG005(ED093T): Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg	----	20	30 ± 4	----	----	----	----	
Cadmium	EG005T	1	mg/kg	----	3	<1 --	----	----	----	----	
Copper	EG005T	5	mg/kg	----	100	68 ± 8	----	----	----	----	
Lead	EG005T	5	mg/kg	----	300	<5 --	----	----	----	----	
Molybdenum	EG005T	5	mg/kg	----	40	<5 --	----	----	----	----	
Nickel	EG005T	5	mg/kg	----	60	200 ± 20	----	----	----	----	
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	128 ± 14	----	----	----	----	
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 --	----	----	----	----	
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	1.1 ± 0.2	----	----	----	----	
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 --	----	----	----	----	
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg	----	450	130 ± 30	----	----	----	----	
EP066: Polychlorinated Biphenyls (PCB)											
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 --	----	----	----	----	
EP074A: Monocyclic Aromatic Hydrocarbons											
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 --	----	----	----	----	
EP074I: Volatile Halogenated Compounds											
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 --	----	----	----	----	
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 --	----	----	----	----	
EP075A: Phenolic Compounds (Non-halogenated)											
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_IB_20220 517_04_05_S S_Primary_AL S	SX_IB_20220 516_08_05_S S_Primary_AL S	SX_IB_20220 516_08_06_S S_Duplicate_ ALS	SX_OB_20220 516_08_15_S S_Primary_AL S	SX_OB_20220 516_12_10_S S_Primary_AL S
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						17-May-2022 04:05	16-May-2022 08:05	16-May-2022 08:06	16-May-2022 08:07	16-May-2022 12:10
						EM2209011-013 MU	EM2209011-014 MU	EM2209011-015 MU	EM2209011-016 MU	EM2209011-017 MU
EP075B: Polynuclear Aromatic Hydrocarbons										
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	..	----	----	----
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10	..	----	----	----
EP080/071: Total Petroleum Hydrocarbons										
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_IB_20220 516_16_12_S S_Primary_AL S	SX_IB_20220 516_16_08_S S_Primary_AL S	SX_OB_20220 516_17_40_S S_Triplicate_ ALS	SX_IB_20220 516_20_04_S S_Primary_AL S	SX_OB_20220 516_20_10_S S_Triplicate_ ALS
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						16-May-2022 16:12	16-May-2022 16:08	16-May-2022 17:40	16-May-2022 20:04	16-May-2022 20:10
						EM2209011-018 MU	EM2209011-019 MU	EM2209011-020 MU	EM2209011-021 MU	EM2209011-022 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_IB_20220 517_00_01_S S_Primary_AL S	SX_IB_20220 517_04_05_S S_Primary_AL S	----	----	----
				Guideline	Guideline					
				Lower Limit	Upper Limit					
						17-May-2022 00:01	17-May-2022 04:05	----	----	----
						EM2209011-023 MU	EM2209011-024 MU			
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

QUALITY CONTROL REPORT

Work Order	: EM2209011	Page	: 1 of 32
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Josh Alexander
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 17-May-2022
Order number	: ----	Date Analysis Commenced	: 18-May-2022
C-O-C number	: 20220517042413-ALS-12	Issue Date	: 24-May-2022
Sampler	: ----		
Site	: 20220517042413-ALS-12		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 24		
No. of samples analysed	: 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>
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4348604)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	98	106	8.0	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	134	161	18.1	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	33	54	49.2	0% - 50%
		EG005T: Copper	7440-50-8	5	mg/kg	54	56	4.2	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	90	97	7.5	0% - 50%
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	116	114	1.9	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	148	154	4.0	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	29	40	32.8	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	48	52	7.8	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	98	107	8.8	0% - 20%



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4352283)									
EM2208960-004	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.4	7.4	0.0	0% - 20%
EM2209011-010	SX_IB_20220516_20_04_S S_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.7	1.3	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4347923)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EA055: Moisture Content	----	0.1	%	27.5	29.0	5.2	0% - 20%
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EA055: Moisture Content	----	0.1	%	31.8	31.9	0.5	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4348605)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4350041)									
EM2208592-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2209011-002	SX_IB_20220516_08_06_S S_Duplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4350903)									
EM2208949-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2208987-002	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4350905)									
EM2209011-007	SX_IB_20220516_16_12_S S_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2209023-003	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4350058)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	150	140	10.0	No Limit
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	120	150	22.6	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4347659)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4344225)									
EM2209011-001	SX_IB_20220516_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



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4344225) - continued									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	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
EM2209011-013	SX_IB_20220517_04_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
EP074H: Naphthalene (QC Lot: 4344225)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4344225)									
EM2209011-001	SX_IB_20220516_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
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074I: Volatile Halogenated Compounds (QC Lot: 4344225) - continued									
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit		
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit		
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4347661)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit		



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4347661) - continued									
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4347661)									
EM2209011-001	SX_IB_20220516_08_05_S S_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
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit
		EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4347661)	SX_IB_20220516_08_05_S S_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



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4347661) - continued									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	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
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit		
EP075I: Organochlorine Pesticides (QC Lot: 4347661)									
EM2209011-001	SX_IB_20220516_08_05_S S_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		



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075I: Organochlorine Pesticides (QC Lot: 4347661) - continued									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	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
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4344225)									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4347660)									
EM2209011-001	SX_IB_20220516_08_05_S S_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
EM2209011-013	SX_IB_20220517_04_05_S S_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



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4347660) - continued									
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4344225)									
EM2209011-001	SX_IB_20220516_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
EM2209011-013	SX_IB_20220517_04_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
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4347660)									
EM2209011-001	SX_IB_20220516_08_05_S S_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
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4349585)									
EM2209011-001	SX_IB_20220516_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
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2209011-013	SX_IB_20220517_04_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
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4349585)									
EM2209011-001	SX_IB_20220516_08_05_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



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4349585) - continued									
EM2209011-001	SX_IB_20220516_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: 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
EM2209011-013	SX_IB_20220517_04_05_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
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit		
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit		
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4349585)									
EM2209011-001	SX_IB_20220516_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
EM2209011-013	SX_IB_20220517_04_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



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4349585) - continued									
EM2209011-013	SX_IB_20220517_04_05_S S_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4349585)									
EM2209011-001	SX_IB_20220516_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
		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
EM2209011-013	SX_IB_20220517_04_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
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4349585)									
EM2209011-001	SX_IB_20220516_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
EM2209011-013	SX_IB_20220517_04_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
Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4353639)									



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4353639) - continued									
EM2209011-001	SX_IB_20220516_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
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4353641)									
EM2209011-014	SX_IB_20220516_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
EM2209011-024	SX_IB_20220517_04_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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4354673)									
EM2209011-004	SX_IB_20220516_08_54_S R_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



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4354673) - continued									
EM2209011-004	SX_IB_20220516_08_54_S R_Rinsate_ALS	EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4353639)									
EM2209011-001	SX_IB_20220516_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
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4353641)									
EM2209011-014	SX_IB_20220516_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
EM2209011-014	SX_IB_20220516_08_05_S S_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4353641) - continued									
EM2209011-024	SX_IB_20220517_04_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		
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4354673)									
EM2209011-004	SX_IB_20220516_08_54_S R_Rinsate_ALS	EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	<0.10	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4353639)									
EM2209011-001	SX_IB_20220516_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



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4353639) - continued									
EM2209011-001	SX_IB_20220516_08_05_S S_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209011-012	SX_IB_20220517_00_01_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
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4353641)									
EM2209011-014	SX_IB_20220516_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
EM2209011-024	SX_IB_20220517_04_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



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4353641) - continued									
EM2209011-024	SX_IB_20220517_04_05_S S_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4354673)									
EM2209011-004	SX_IB_20220516_08_54_S R_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
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4353639)									
EM2209011-001	SX_IB_20220516_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
EM2209011-012	SX_IB_20220517_00_01_S S_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4353641)									
EM2209011-014	SX_IB_20220516_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



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4353641) - continued									
EM2209011-014	SX_IB_20220516_08_05_S S_Primary_ALS	EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209011-024	SX_IB_20220517_04_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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4354673)									
EM2209011-004	SX_IB_20220516_08_54_S R_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
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4353639)									
EM2209011-001	SX_IB_20220516_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
EM2209011-012	SX_IB_20220517_00_01_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
EP231P: PFAS Sums (QC Lot: 4353641)									
EM2209011-014	SX_IB_20220516_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
EM2209011-024	SX_IB_20220517_04_05_S S_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit

Page : 18 of 32
 Work Order : EM2209011
 Client : AGON ENVIRONMENTAL PTY LTD
 Project : JC0927



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231P: PFAS Sums (QC Lot: 4353641) - continued									
EM2209011-024	SX_IB_20220517_04_05_S S_Primary_ALS	EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4354673)									
EM2209011-004	SX_IB_20220516_08_54_S R_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	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4348604)									
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	95.8	70.0	130	
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	55.3	50.0	130	
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	92.4	70.0	130	
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	84.6	70.0	130	
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	85.4	70.0	130	
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	81.1	70.0	130	
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	87.3	70.0	130	
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----	
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	79.1	70.0	130	
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	109	70.0	130	
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	72.1	70.0	130	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4350526)									
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.1	----	----	----	----	
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4352283)									
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101	
				----	7 pH Unit	101	99.3	101	
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4348605)									
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	96.9	70.0	130	
EG048G: Hexavalent Chromium (Alkaline Digest) (QCLot: 4350041)									
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	88.3	70.0	130	
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4350903)									
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	95.9	70.0	130	
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4350905)									
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	91.4	70.0	130	
EK040T: Fluoride Total (QCLot: 4350058)									
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	78.7	75.2	110	
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4347659)									
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	111	67.4	136	
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4344225)									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	104	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	101	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	98.0	66.6	115	



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
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4344225) - continued								
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	96.3	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	96.1	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	96.9	68.4	110
EP074H: Naphthalene (QCLot: 4344225)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	107	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4344225)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	133	47.0	138
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	122	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	107	72.3	115
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	117	60.5	122
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	101	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	98.3	66.6	115
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	102	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	104	58.4	127
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	104	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	96.8	64.7	115
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	94.0	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	98.8	60.0	119
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	100	71.8	116
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	92.4	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	94.4	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	95.8	70.3	113
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	94.4	62.6	113
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	94.8	70.8	110
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	88.0	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4347661)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	101	74.5	126
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	98.6	72.7	126
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	99.2	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	100	72.8	128
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	99.5	73.3	134
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	96.8	72.4	128
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	99.0	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	99.7	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	94.2	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4347661)								



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4347661) - continued									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	102	71.5	130	
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	99.6	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	99.3	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	97.3	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	99.0	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	69.7	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	104	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	90.6	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	93.8	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	82.9	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4347661)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	101	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	99.8	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	101	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	103	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	103	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	102	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	103	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	102	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	101	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	104	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	106	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	103	65.1	130	
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	106	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	106	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	106	71.3	134	
EP075I: Organochlorine Pesticides (QCLot: 4347661)									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	102	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	103	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	103	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	103	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	102	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	102	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	102	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	103	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	104	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	104	69.4	134	



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	
EP075I: Organochlorine Pesticides (QCLot: 4347661) - continued								
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	104	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	103	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	92.0	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	115	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	102	71.4	135
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	102	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	104	70.2	135
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	102	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	103	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4344225)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	102	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4347660)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	98.6	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	99.5	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	87.5	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	95.8	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4344225)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	99.8	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4347660)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	104	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	97.5	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	82.0	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	98.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4349585)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	101	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	91.6	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	68.4	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	82.1	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	78.9	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	80.3	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4349585)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	86.7	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.5	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	73.0	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.0	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.7	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	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4349585) - continued									
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.8	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	69.2	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.5	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	69.8	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	90.2	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4349585)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.6	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	72.4	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	74.7	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	75.1	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	99.3	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4349585)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	88.0	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	84.9	64.0	140	
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	89.6	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	103	70.0	130	
EP231P: PFAS Sums (QCLot: 4349585)									
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	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4353639)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	104	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	113	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	110	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	112	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	119	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	114	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
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4353641)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	103	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	102	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	99.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.5	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	93.6	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	100	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4354673)								
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.444 µg/L	97.6	72.0	130
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.47 µg/L	113	71.0	127
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.457 µg/L	110	68.0	131
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.477 µg/L	117	69.0	134
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.465 µg/L	102	65.0	140
EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.482 µg/L	99.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4353639)								
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	106	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	117	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	105	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	102	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.9	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	100	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	107	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4353641)								
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	105	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	97.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	100	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	98.3	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.9	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	103	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4354673)								



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4354673) - continued									
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	93.8	73.0	129	
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	96.0	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	96.7	72.0	130	
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	96.8	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	94.2	71.0	129	
EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.5 µg/L	90.7	69.0	133	
EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.5 µg/L	102	72.0	134	
EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	93.9	65.0	144	
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	94.9	71.0	132	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4353639)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	118	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	110	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	114	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	113	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	121	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	109	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	89.8	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4353641)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	95.0	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	103	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	94.0	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.7	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	111	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	109	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	111	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4354673)									
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	95.0	67.0	137	
EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	1.25 µg/L	96.6	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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4354673) - continued								
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	104	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	103	70.0	130
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	101	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	99.9	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	96.0	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4353639)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	107	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	115	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	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	84.8	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4353641)								
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	109	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	110	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	86.7	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4354673)								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.469 µg/L	99.0	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	110	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	98.4	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	86.9	70.0	130
EP231P: PFAS Sums (QCLot: 4353639)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4353641)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4354673)								
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	
EP231P: PFAS Sums (QCLot: 4354673) - continued									
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	SpikeRecovery(%) MS	Acceptable Limits (%) Low High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4348604)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	100	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	91.3	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	79.3	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	93.2	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	91.1	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	93.0	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	84.0	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4348605)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	95.0	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4350041)							
EM2208592-025	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	76.6	58.0	114
EM2208592-025	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	75.6	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4350903)							
EM2208949-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	110	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4350905)							
EM2209011-008	SX_IB_20220516_16_08_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	86.2	70.0	130
EK040T: Fluoride Total (QCLot: 4350058)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	70.4	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4347659)							
EM2209011-003	SX_OB_20220516_08_15_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	106	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4344225)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	90.5	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	94.4	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4344225)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	70.9	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	81.5	48.1	128



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074I: Volatile Halogenated Compounds (QCLot: 4344225) - continued							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	84.9	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4347661)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	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	91.7	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4347661)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP075-EM: Phenol	108-95-2	3 mg/kg	104	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	97.9	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4347661)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	96.0	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	104	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4344225)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	93.4	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4347660)							
EM2209011-006	SX_OB_20220516_12_10_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	100	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	100	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	89.8	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	96.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4344225)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	91.9	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4347660)							
EM2209011-006	SX_OB_20220516_12_10_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	104	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	98.9	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	92.3	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	99.2	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4349585)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	100	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	# 62.5	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	86.6	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	88.9	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	83.4	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	92.0	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4349585)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	89.6	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	108	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	79.4	70.0	132



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4349585) - continued							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	96.7	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	94.9	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	128	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	75.1	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	77.2	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	86.2	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	72.4	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	94.3	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4349585)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	99.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	88.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	83.4	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	# 64.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	95.8	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	102	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	103	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4349585)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	94.6	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	91.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	101	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	123	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4353639)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	113	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	92.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	106	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	104	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	117	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	137	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4353641)							
EM2209011-015	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	113	72.0	130



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4353641) - continued							
EM2209011-015	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	91.0	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	88.5	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	102	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	88.9	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	91.5	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4354673)							
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.444 µg/L	102	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	120	68.0	131
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.477 µg/L	123	69.0	134
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.465 µg/L	110	65.0	140
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.482 µg/L	99.3	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4353639)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_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	102	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	107	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	102	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	94.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	110	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	96.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	90.2	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	97.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	94.6	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	111	71.0	132		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4353641)							
EM2209011-015	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	101	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	111	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	95.5	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	107	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	100	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	120	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	87.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	95.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	96.2	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	87.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	116	71.0	132
		EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4354673)					
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 µg/L	94.5	73.0	129



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4354673) - continued							
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 µg/L	98.9	72.0	129
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 µg/L	105	72.0	129
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 µg/L	97.0	72.0	130
		EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 µg/L	91.8	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	97.0	71.0	129
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 µg/L	98.5	69.0	133
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 µg/L	113	72.0	134
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 µg/L	96.0	65.0	144
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 µg/L	99.7	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4353639)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	117	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	126	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	108	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	112	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	119	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4353641)							
EM2209011-015	SX_IB_20220516_08_06_SS_Duplicate_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	111	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.8	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	88.7	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	106	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	103	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	107	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4354673)							
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 µg/L	119	67.0	137



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4354673) - continued							
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 µg/L	99.6	68.0	141
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 µg/L	102	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 µg/L	112	70.0	130
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 µg/L	107	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	113	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4353639)							
EM2209011-002	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	102	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	113	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	120	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	90.8	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4353641)							
EM2209011-015	SX_IB_20220516_08_06_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	109	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	114	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	117	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	79.0	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4354673)							
EM2209011-005	SX_IB_20220516_08_56_SB_Blank_ALS	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.469 µg/L	95.5	63.0	143
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.476 µg/L	105	64.0	140
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.48 µg/L	109	67.0	138
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.483 µg/L	88.6	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2209011	Page	: 1 of 16
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 17-May-2022
Site	: 20220517042413-ALS-12	Issue Date	: 24-May-2022
Sampler	: ----	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
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	EM2209011--002	SX_IB_20220516_08_06_SS	Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	62.5 %	73.0-123%	Recovery less than lower data quality objective
EP231C: Perfluoroalkyl Sulfonamides	EM2209011--002	SX_IB_20220516_08_06_SS	N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	64.4 %	70.0-130%	Recovery less than lower data quality objective

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS	16-May-2022	23-May-2022	23-May-2022	✓	23-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EA001) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	23-May-2022	24-May-2022	✓	23-May-2022	23-May-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS	16-May-2022	----	----	----	19-May-2022	30-May-2022	✓
Soil Glass Jar - Unpreserved (EA055) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	----	----	----	19-May-2022	31-May-2022	✓



Matrix: SOIL

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	12-Nov-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	13-Nov-2022	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	13-Jun-2022	✓	20-May-2022	13-Jun-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	14-Jun-2022	✓	20-May-2022	14-Jun-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)								
Soil Glass Jar - Unpreserved (EG048G) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	21-May-2022	13-Jun-2022	✓	23-May-2022	28-May-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	21-May-2022	14-Jun-2022	✓	23-May-2022	28-May-2022	✓
EK026SF: Total CN by Segmented Flow Analyser								
Soil Glass Jar - Unpreserved (EK026SF) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	21-May-2022	03-Jun-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	21-May-2022	03-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	
EK040T: Fluoride Total								
Soil Glass Jar - Unpreserved (EK040T) SX_IB_20220516_08_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	16-May-2022	20-May-2022	13-Jun-2022	✓	24-May-2022	13-Jun-2022	✓	
Soil Glass Jar - Unpreserved (EK040T) SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	14-Jun-2022	✓	24-May-2022	14-Jun-2022	✓	
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_IB_20220516_08_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	16-May-2022	20-May-2022	12-Nov-2022	✓	----	----	----	
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	----	----	----	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_IB_20220516_08_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	16-May-2022	20-May-2022	12-Nov-2022	✓	----	----	----	
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	----	----	----	
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066-EM) SX_IB_20220516_08_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓	
Soil Glass Jar - Unpreserved (EP066-EM) SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-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	
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	18-May-2022	23-May-2022	✓	18-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	18-May-2022	24-May-2022	✓	18-May-2022	24-May-2022	✓
EP074H: Naphthalene								
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	18-May-2022	23-May-2022	✓	18-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	18-May-2022	24-May-2022	✓	18-May-2022	24-May-2022	✓
EP074I: Volatile Halogenated Compounds								
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	18-May-2022	23-May-2022	✓	18-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	18-May-2022	24-May-2022	✓	18-May-2022	24-May-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-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	
EP075A: Phenolic Compounds (Non-halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-Jun-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-Jun-2022	✓
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-Jun-2022	✓



Matrix: SOIL

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	18-May-2022	23-May-2022	✓	18-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	18-May-2022	24-May-2022	✓	18-May-2022	24-May-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-Jun-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	18-May-2022	23-May-2022	✓	18-May-2022	23-May-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	30-May-2022	✓	20-May-2022	29-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	18-May-2022	24-May-2022	✓	18-May-2022	24-May-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	31-May-2022	✓	20-May-2022	29-Jun-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	29-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	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS,	16-May-2022	20-May-2022	12-Nov-2022	✓	20-May-2022	29-Jun-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS	17-May-2022	20-May-2022	13-Nov-2022	✓	20-May-2022	29-Jun-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	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X-INJ) SX_IB_20220516_08_54_SR_Rinsate_ALS,	SX_IB_20220516_08_56_SB_Blank_ALS	16-May-2022	23-May-2022	12-Nov-2022	✓	23-May-2022	12-Nov-2022	✓
HDPE (no PTFE) (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	20-May-2022	23-May-2022	16-Nov-2022	✓	23-May-2022	16-Nov-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X-INJ) SX_IB_20220516_08_54_SR_Rinsate_ALS,	SX_IB_20220516_08_56_SB_Blank_ALS	16-May-2022	23-May-2022	12-Nov-2022	✓	23-May-2022	12-Nov-2022	✓
HDPE (no PTFE) (EP231X) SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	20-May-2022	23-May-2022	16-Nov-2022	✓	23-May-2022	16-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	
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X-INJ)								
SX_IB_20220516_08_54_SR_Rinsate_ALS,	SX_IB_20220516_08_56_SB_Blank_ALS	16-May-2022	23-May-2022	12-Nov-2022	✓	23-May-2022	12-Nov-2022	✓
HDPE (no PTFE) (EP231X)								
SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	20-May-2022	23-May-2022	16-Nov-2022	✓	23-May-2022	16-Nov-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X-INJ)								
SX_IB_20220516_08_54_SR_Rinsate_ALS,	SX_IB_20220516_08_56_SB_Blank_ALS	16-May-2022	23-May-2022	12-Nov-2022	✓	23-May-2022	12-Nov-2022	✓
HDPE (no PTFE) (EP231X)								
SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS, SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220516_08_06_SS_Duplicate_ALS, SX_OB_20220516_12_10_SS_Primary_ALS, SX_IB_20220516_16_08_SS_Primary_ALS, SX_IB_20220516_20_04_SS_Primary_ALS, SX_IB_20220517_00_01_SS_Primary_ALS, SX_IB_20220516_08_05_SS_Primary_ALS, SX_OB_20220516_08_15_SS_Primary_ALS, SX_IB_20220516_16_12_SS_Primary_ALS, SX_OB_20220516_17_40_SS_Triplicate_ALS, SX_OB_20220516_20_10_SS_Triplicate_ALS, SX_IB_20220517_04_05_SS_Primary_ALS	20-May-2022	23-May-2022	16-Nov-2022	✓	23-May-2022	16-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	
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X-INJ)								
SX_IB_20220516_08_54_SR_Rinsate_ALS,	SX_IB_20220516_08_56_SB_Blank_ALS	16-May-2022	23-May-2022	12-Nov-2022	✓	23-May-2022	12-Nov-2022	✓
HDPE (no PTFE) (EP231X)								
SX_IB_20220516_08_05_SS_Primary_ALS,	SX_IB_20220516_08_06_SS_Duplicate_ALS,	20-May-2022	23-May-2022	16-Nov-2022	✓	23-May-2022	16-Nov-2022	✓
SX_OB_20220516_08_15_SS_Primary_ALS,	SX_OB_20220516_12_10_SS_Primary_ALS,							
SX_IB_20220516_16_12_SS_Primary_ALS,	SX_IB_20220516_16_08_SS_Primary_ALS,							
SX_OB_20220516_17_40_SS_Triplicate_ALS,	SX_IB_20220516_20_04_SS_Primary_ALS,							
SX_OB_20220516_20_10_SS_Triplicate_ALS,	SX_IB_20220517_00_01_SS_Primary_ALS,							
SX_IB_20220517_04_05_SS_Primary_ALS,	SX_IB_20220516_08_05_SS_Primary_ALS,							
SX_IB_20220516_08_06_SS_Duplicate_ALS,	SX_OB_20220516_08_15_SS_Primary_ALS,							
SX_OB_20220516_12_10_SS_Primary_ALS,	SX_IB_20220516_16_12_SS_Primary_ALS,							
SX_IB_20220516_16_08_SS_Primary_ALS,	SX_OB_20220516_17_40_SS_Triplicate_ALS,							
SX_IB_20220516_20_04_SS_Primary_ALS,	SX_OB_20220516_20_10_SS_Triplicate_ALS,							
SX_IB_20220517_00_01_SS_Primary_ALS,	SX_IB_20220517_04_05_SS_Primary_ALS							



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaural	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	4	40	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	14	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	17	11.76	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	16	12.50	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
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	16	6.25	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
Method Blanks (MB)							
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	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	16	6.25	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	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	16	6.25	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	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	30	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	4	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl ₂ extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl ₂) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).



Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	WATER	In house: Direct injection analysis of fresh waters after dilution (1:1) with mobile phase solvent. Analysis by LC-Electrospray-MS-MS, Negative Mode using MRM. Where commercially available, isotopically labelled analogues of the target analytes are used as internal standards for quantification. Where a labelled analogue is not commercially available, the internal standard with similar chemistry and the closest retention time to the target is used for quantification. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl ₂ extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.



<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.
Preparation for PFAS in water.	EP231-PR	WATER	Method presumes direct injection without workup. Preparation includes addition of internal standard and surrogate, and filtration prior to analysis.

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: Agon Environmental	SAMPLER: Brandon Clarke
ADDRESS/OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbury)
PROJECT MANAGER (PM): Craig Trimbury	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0987	EMAIL REPORT TO: Labreports.IST@agoneviro.com.au agoneviro.com.au @esdat.com.au melb@melb.abresults.com.au
SITE: 20220525162153-ALS-6	P.O. NO.:
RESULTS REQUIRED (Qno): 2 days (27/05/2022)	QUOTE NO.: ME-50-18 WGP7
	EMAIL INVOICE TO: (if different to report)
	ANALYSIS REQUIRED including BUTES (note - suite codes must be listed to attract suite prices)

Environmental Division
Melbourne
Work Order Reference
EM2209669



Telephone + 61-3-8649 9600

ALS ID	SAMPLE INFORMATION (note: S = Soil, W=Water)	MATRIX	DATE	Time	CONTAINER INFORMATION		ANALYSIS REQUIRED				Notes	
					Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)		D Leachate PFAS - Extended Suite
13	SX_OB_20220525_14_00_SS_Primary_ALS	S	25/05/2022	14:00			X	X	X	X		B02.03
14	SX_OB_20220525_14_02_SS_Primary_ALS	S	25/05/2022	14:02			X	X	X	X		B02.03
15	SX_OB_20220525_14_04_SS_Duplicate_ALS	S	25/05/2022	14:04			X	X	X	X		B02.03
16	SX_OB_20220525_14_22_SS_Triplicate_ALS	S	25/05/2022	14:22			X	X	X	X		E06.02
17	SX_OB_20220525_14_24_SS_Primary_ALS	S	25/05/2022	14:24			X	X	X	X		E06.02
18	SX_OB_20220525_14_26_SS_Primary_ALS	S	25/05/2022	14:26			X	X	X	X		E06.02
19	SX_OB_20220525_14_28_SS_Duplicate_ALS	S	25/05/2022	14:28			X	X	X	X		E06.02
20	SX_IB_20220525_14_49_SS_Triplicate_ALS	S	25/05/2022	14:49			X	X	X	X		F01.01
21	SX_IB_20220525_14_52_SS_Primary_ALS	S	25/05/2022	14:52			X	X	X	X		F01.01
22	SX_IB_20220525_14_55_SS_Duplicate_ALS	S	25/05/2022	14:55			X	X	X	X		F01.01
25	SX_OB_20220525_15_05_SS_Bank_ALS	W	25/05/2022	15:05			X					F01.01

RELINQUISHED BY:		RECEIVED BY:	
Name: David Lawson	Date: 25/05/2022	Name:	Date:
Of: Agon Environmental	Time: 16:06	Of:	Time:
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/Cl Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; V = VOA Via HCl Preserved; VS = VOA Via Sulphuric Preserved; SG = Sulphuric Preserved Amber Glass; H = HCl Preserved Plastic; HB = HCl Preserved Special 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

AUSTRALIAN LABORATORY SERVICES P/L

Received: 1646
25-5
Chore: 17.9°C Seat
Temp: 17.9°C
Ice / Icebricks
Carrier: Client
N

URGENT

CERTIFICATE OF ANALYSIS

Work Order : **EM2209669**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : DAVID LAWSON
Address : D1.1 63-85 TURNER STREET
 PORT MELBOURNE 3207

Telephone : ----
Project : JC0927
Order number :
C-O-C number : 20220525162153-ALS-6
Sampler : BRANDON CLARKE
Site : 20220525162153-ALS-6
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 22
No. of samples analysed : 22

Page : 1 of 29
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 16:46
Date Analysis Commenced : 26-May-2022
Issue Date : 31-May-2022 15:28



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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

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

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

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

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

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

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS 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: EM2209669 #1-4, 6-10, the results for Hexavalent Chromium have been confirmed by re-extraction 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.
- EK026SF : EM2209070 #2 Poor matrix spike recovery for total cyanide due to sample matrix.
- 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, PFTTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EP231X-INJ: The direct injection LCMSMS method may be used where the sample matrix is not suitable for Solid Phase Extraction (e.g. significant particulate load) or where only a single sample container is received.



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	91.0	87.2	88.5	98.6	86.7
13C8-PFOA	----	0.02	%	101	98.0	101	100	97.0



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.1	90.6	92.1	92.1	91.9
13C8-PFOA	----	0.02	%	102	99.2	99.5	98.0	95.0



Analytical Results

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

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS DI	SX_OB_20220525_14_02_SS_Primary_ALS DI	SX_OB_20220525_14_04_SS_Duplicate_ALS DI	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	SX_OB_20220525_14_24_SS_Primary_ALS DI
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-013 Result	EM2209669-014 Result	EM2209669-015 Result	EM2209669-016 Result	EM2209669-017 Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

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

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS DI	SX_OB_20220525_14_02_SS_Primary_ALS DI	SX_OB_20220525_14_04_SS_Duplicate_ALS DI	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	SX_OB_20220525_14_24_SS_Primary_ALS DI
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-013	EM2209669-014	EM2209669-015	EM2209669-016	EM2209669-017
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	86.7	88.4	93.3	94.5	92.6
13C8-PFOA	----	0.02	%	99.6	99.0	99.4	96.1	93.9



Analytical Results

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

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS_DI	SX_OB_20220525_14_28_SS_Duplicate_ALS_DI	SX_IB_20220525_14_49_SS_Triplicate_ALS_DI	SX_IB_20220525_14_52_SS_Primary_ALS_DI	SX_IB_20220525_14_55_SS_Duplicate_ALS_DI
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-018	EM2209669-019	EM2209669-020	EM2209669-021	EM2209669-022
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

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

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS DI	SX_OB_20220525_14_28_SS_Duplicate_ALS DI	SX_IB_20220525_14_49_SS_Triplicate_ALS DI	SX_IB_20220525_14_52_SS_Primary_ALS DI	SX_IB_20220525_14_55_SS_Duplicate_ALS DI
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-018	EM2209669-019	EM2209669-020	EM2209669-021	EM2209669-022
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	90.5	93.2	87.6	86.5	99.2
13C8-PFOA	----	0.02	%	95.7	98.6	98.0	95.7	97.9



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl ₂)	----	0.1	pH Unit	7.6	7.9	7.6	7.8	7.8
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	31.5	32.5	32.5	31.1	33.3
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	46	46	38	36	59
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	95	93	112	83	90
Copper	7440-50-8	5	mg/kg	49	55	50	50	65
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	158	158	152	138	164
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	91	89	96	92	113
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	120	160	130	160	170
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.4	9.5	9.4	9.0	8.9
After HCl pH	----	0.1	pH Unit	1.6	1.6	1.6	1.6	1.6
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.2	5.2	5.2	5.1	5.2
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS	SX_OB_20220525_14_02_SS_Primary_ALS	SX_OB_20220525_14_04_SS_Duplicate_ALS	SX_OB_20220525_14_22_SS_Triplicate_ALS	SX_OB_20220525_14_24_SS_Primary_ALS
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-001	EM2209669-002	EM2209669-003	EM2209669-004	EM2209669-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	114	121	98.3	106	107
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	96.1	95.6	84.7	75.5	88.5
Toluene-D8	2037-26-5	0.1	%	93.3	96.6	84.4	71.4	82.8
4-Bromofluorobenzene	460-00-4	0.1	%	110	110	104	92.1	99.4
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	104	108	90.5	96.8	99.6
2-Chlorophenol-D4	93951-73-6	0.025	%	97.7	102	85.7	91.2	94.4
2,4,6-Tribromophenol	118-79-6	0.025	%	103	110	85.3	94.6	93.1
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	102	106	89.4	93.1	100.0
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	94.7	100	85.7	88.5	92.1
2-Fluorobiphenyl	321-60-8	0.025	%	102	108	92.1	95.9	99.7
Anthracene-d10	1719-06-8	0.025	%	102	108	91.6	95.6	100.0
4-Terphenyl-d14	1718-51-0	0.025	%	93.4	99.0	82.5	86.4	89.9
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	92.8	92.6	90.0	106	84.8
13C8-PFOA	----	0.0002	%	92.2	96.6	93.6	100	89.9



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	8.0	7.8	8.0	8.1	8.2
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	30.3	31.2	27.6	22.2	29.0
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	49	41	36	28	28
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	90	86	89	88	96
Copper	7440-50-8	5	mg/kg	54	51	56	56	54
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	139	144	160	161	160
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	89	88	92	100	101
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	1.0	1.2	1.1
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	210	210	240	210	290
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.0	8.8	9.8	9.8	9.9
After HCl pH	----	0.1	pH Unit	1.6	1.6	1.6	1.6	1.6
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.2	5.2	5.2	5.2	5.2
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS	SX_OB_20220525_14_28_SS_Duplicate_ALS	SX_IB_20220525_14_49_SS_Triplicate_ALS	SX_IB_20220525_14_52_SS_Primary_ALS	SX_IB_20220525_14_55_SS_Duplicate_ALS
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-006	EM2209669-007	EM2209669-008	EM2209669-009	EM2209669-010
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	118	112	112	120	114
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	84.4	83.9	78.3	91.8	88.9
Toluene-D8	2037-26-5	0.1	%	80.7	76.3	69.4	87.7	85.5
4-Bromofluorobenzene	460-00-4	0.1	%	98.6	96.0	92.6	107	107
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	110	103	102	104	104
2-Chlorophenol-D4	93951-73-6	0.025	%	104	97.5	95.7	97.8	98.8
2,4,6-Tribromophenol	118-79-6	0.025	%	103	97.3	95.8	102	102
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	107	101	99.3	102	105
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	102	95.8	93.7	97.4	97.5
2-Fluorobiphenyl	321-60-8	0.025	%	108	103	100	104	104
Anthracene-d10	1719-06-8	0.025	%	108	103	101	104	104
4-Terphenyl-d14	1718-51-0	0.025	%	97.5	92.5	91.2	94.1	93.7
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	88.5	96.6	91.7	98.6	99.2
13C8-PFOA	----	0.0002	%	94.7	103	96.3	96.4	107



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_00_SS_Primary_ALS DI	SX_OB_20220525_14_02_SS_Primary_ALS DI	SX_OB_20220525_14_04_SS_Duplicate_ALS DI	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	SX_OB_20220525_14_24_SS_Primary_ALS DI
Sampling date / time				25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
Compound	CAS Number	LOR	Unit	EM2209669-013	EM2209669-014	EM2209669-015	EM2209669-016	EM2209669-017
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.7	10.0	9.6	9.4	9.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220525_14_26_SS_Primary_ALS DI	SX_OB_20220525_14_28_SS_Duplicate_ALS DI	SX_IB_20220525_14_49_SS_Triplicate_ALS DI	SX_IB_20220525_14_52_SS_Primary_ALS DI	SX_IB_20220525_14_55_SS_Duplicate_ALS DI
Sampling date / time				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
Compound	CAS Number	LOR	Unit	EM2209669-018	EM2209669-019	EM2209669-020	EM2209669-021	EM2209669-022
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.6	9.6	10.2	10.2	10.2



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		SX_OB_20220525_15 _04_SR_Rinsate_ALS	SX_OB_20220525_15 _05_SB_Blank_ALS	----	----	----
Sampling date / time			25-May-2022 15:04		25-May-2022 15:05		----	----	----
Compound	CAS Number	LOR	Unit	EM2209669-011	EM2209669-012	-----	-----	-----	
				Result	Result	---	---	---	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.10	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	----	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
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_20220525_15 _04_SR_Rinsate_ALS	SX_OB_20220525_15 _05_SB_Blank_ALS	----	----	----
Sampling date / time				25-May-2022 15:04	25-May-2022 15:05	----	----	----	
Compound	CAS Number	LOR	Unit	EM2209669-011	EM2209669-012	-----	-----	-----	
				Result	Result	---	---	---	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
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	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	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	----	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	79.3	75.6	----	----	----	
13C8-PFOA	----	0.02	%	97.0	101	----	----	----	



Surrogate Control Limits

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

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

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1,2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

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

Automated Guideline Comparison Report

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

Work Order	: EM2209669	Page	: 1 of 27
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: david.lawson@agonenviro.com.au	E-mail	: Josh.Alexander@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 25-May-2022 16:46
Order number	:	Date Analysed	: 26-May-2022
C-O-C number	: 20220525162153-ALS-6	Date Issued	: 31-May-2022 15:27
No. of samples received	: 22		
No. of samples analysed	: 22	Quote number	: EN/150/19 -WGTP -Bulk Sample Quote

General Comments

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

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

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

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

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



Summary of Thresholds Reached or Exceeded

EPA Victoria Publication IWRG 621 (2009)

Table 2: Soil Hazard Categorisation Thresholds : Fill Material

Client Sample ID	ALS Sample ID	Compound	Method	LOR	Limits	Result
SX_OB_20220525_14_00_S SS_Primary_ALS	EM2209669-001	Arsenic	EG005T	5	< 20 mg/kg	46 mg/kg
SX_OB_20220525_14_00_S SS_Primary_ALS	EM2209669-001	Nickel	EG005T	5	< 60 mg/kg	158 mg/kg
SX_OB_20220525_14_02_S SS_Primary_ALS	EM2209669-002	Arsenic	EG005T	5	< 20 mg/kg	46 mg/kg
SX_OB_20220525_14_02_S SS_Primary_ALS	EM2209669-002	Nickel	EG005T	5	< 60 mg/kg	158 mg/kg
SX_OB_20220525_14_04_S SS_Duplicate_ALS	EM2209669-003	Arsenic	EG005T	5	< 20 mg/kg	38 mg/kg
SX_OB_20220525_14_04_S SS_Duplicate_ALS	EM2209669-003	Nickel	EG005T	5	< 60 mg/kg	152 mg/kg
SX_OB_20220525_14_22_S SS_Triplicate_ALS	EM2209669-004	Arsenic	EG005T	5	< 20 mg/kg	36 mg/kg
SX_OB_20220525_14_22_S SS_Triplicate_ALS	EM2209669-004	Nickel	EG005T	5	< 60 mg/kg	138 mg/kg
SX_OB_20220525_14_24_S SS_Primary_ALS	EM2209669-005	Arsenic	EG005T	5	< 20 mg/kg	59 mg/kg
SX_OB_20220525_14_24_S SS_Primary_ALS	EM2209669-005	Nickel	EG005T	5	< 60 mg/kg	164 mg/kg
SX_OB_20220525_14_26_S SS_Primary_ALS	EM2209669-006	Arsenic	EG005T	5	< 20 mg/kg	49 mg/kg
SX_OB_20220525_14_26_S SS_Primary_ALS	EM2209669-006	Nickel	EG005T	5	< 60 mg/kg	139 mg/kg
SX_OB_20220525_14_28_S SS_Duplicate_ALS	EM2209669-007	Arsenic	EG005T	5	< 20 mg/kg	41 mg/kg
SX_OB_20220525_14_28_S SS_Duplicate_ALS	EM2209669-007	Nickel	EG005T	5	< 60 mg/kg	144 mg/kg
SX_IB_20220525_14_49_S S_Triplicate_ALS	EM2209669-008	Arsenic	EG005T	5	< 20 mg/kg	36 mg/kg
SX_IB_20220525_14_49_S S_Triplicate_ALS	EM2209669-008	Nickel	EG005T	5	< 60 mg/kg	160 mg/kg
SX_IB_20220525_14_49_S S_Triplicate_ALS	EM2209669-008	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.0 mg/kg
SX_IB_20220525_14_52_S S_Primary_ALS	EM2209669-009	Arsenic	EG005T	5	< 20 mg/kg	28 mg/kg
SX_IB_20220525_14_52_S S_Primary_ALS	EM2209669-009	Nickel	EG005T	5	< 60 mg/kg	161 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_14_52_S S_Primary_ALS	EM2209669-009	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.2 mg/kg
SX_IB_20220525_14_55_S S_Duplicate_ALS	EM2209669-010	Arsenic	EG005T	5	< 20 mg/kg	28 mg/kg
SX_IB_20220525_14_55_S S_Duplicate_ALS	EM2209669-010	Nickel	EG005T	5	< 60 mg/kg	160 mg/kg
SX_IB_20220525_14_55_S S_Duplicate_ALS	EM2209669-010	Hexavalent Chromium	EG048G	1.0	< 1 mg/kg	1.1 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_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220			
				Sampling date/time					525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S		
									S_Primary_AL S	S_Primary_AL S	S_Duplicate_ ALS	S_Triplicate_ ALS	S_Primary_AL S		
							25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24				
							EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU				
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5		7.6 ± 0.1	7.9 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.8 ± 0.1				
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	2000		46 ± 6	46 ± 6	38 ± 5	36 ± 5	59 ± 7				
Cadmium	EG005T	1	mg/kg	----	400		<1 ..	<1 ..	<1 ..	<1 ..	<1 ..				
Copper	EG005T	5	mg/kg	----	20000		49 ± 6	55 ± 7	50 ± 6	50 ± 6	65 ± 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		158 ± 16	158 ± 16	152 ± 15	138 ± 14	164 ± 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		91 ± 10	89 ± 10	96 ± 11	92 ± 10	113 ± 12				
EG035T: Total Recoverable Mercury by FIMS															
Mercury	EG035T	0.1	mg/kg	----	300		<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..				
EG048: Hexavalent Chromium (Alkaline Digest)															
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000		<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..				
EK026SF: Total CN by Segmented Flow Analyser															
Total Cyanide	EK026SF	5	mg/kg	----	10000		<5 ..	<5 ..	<5 ..	<5 ..	<5 ..				
EK040T: Fluoride Total															
Fluoride	EK040T	100	mg/kg	----	40000		120 ± 30	160 ± 40	130 ± 30	160 ± 40	170 ± 40				
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	16		<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..				
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240		<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..				
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8		<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..				
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11		<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..				
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50		<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..				
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320		<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..				



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	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS
				Guideline	Guideline	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.6 ± 0.1	7.9 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	46 ± 6	46 ± 6	38 ± 5	36 ± 5	59 ± 7
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	49 ± 6	55 ± 7	50 ± 6	50 ± 6	65 ± 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	158 ± 16	158 ± 16	152 ± 15	138 ± 14	164 ± 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	91 ± 10	89 ± 10	96 ± 11	92 ± 10	113 ± 12
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	10000	120 ± 30	160 ± 40	130 ± 30	160 ± 40	170 ± 40
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Lower Limit	Upper Limit	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS
				Guideline	Guideline	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	7.6 ± 0.1	7.9 ± 0.1	7.6 ± 0.1	7.8 ± 0.1	7.8 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	46 ± 6	46 ± 6	38 ± 5	36 ± 5	59 ± 7
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	49 ± 6	55 ± 7	50 ± 6	50 ± 6	65 ± 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	158 ± 16	158 ± 16	152 ± 15	138 ± 14	164 ± 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	91 ± 10	89 ± 10	96 ± 11	92 ± 10	113 ± 12
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..	<1.0 ..
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	450	120 ± 30	160 ± 40	130 ± 30	160 ± 40	170 ± 40
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS	S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS
				Lower Limit	Upper Limit	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-001 MU	EM2209669-002 MU	EM2209669-003 MU	EM2209669-004 MU	EM2209669-005 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	8.1 ± 0.1	8.2 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	49 ± 6	41 ± 5	36 ± 5	28 ± 4	28 ± 4
Cadmium	EG005T	1	mg/kg	----	400	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	20000	54 ± 6	51 ± 6	56 ± 7	56 ± 7	54 ± 6
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	139 ± 14	144 ± 14	160 ± 16	161 ± 16	160 ± 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	89 ± 10	88 ± 10	92 ± 10	100 ± 11	101 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 ..	<1.0 ..	1.0 ± 0.2	1.2 ± 0.2	1.1 ± 0.2
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	40000	210 ± 40	210 ± 40	240 ± 40	210 ± 40	290 ± 50
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	8.1 ± 0.1	8.2 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	49 ± 6	41 ± 5	36 ± 5	28 ± 4	28 ± 4
Cadmium	EG005T	1	mg/kg	----	100	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	5000	54 ± 6	51 ± 6	56 ± 7	56 ± 7	54 ± 6
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	139 ± 14	144 ± 14	160 ± 16	161 ± 16	160 ± 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	89 ± 10	88 ± 10	92 ± 10	100 ± 11	101 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 ..	<1.0 ..	1.0 ± 0.2	1.2 ± 0.2	1.1 ± 0.2
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	10000	210 ± 40	210 ± 40	240 ± 40	210 ± 40	290 ± 50
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..	<0.30 ..
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..	<0.05 ..
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..	<0.03 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Lower Limit	Upper Limit	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Guideline	Guideline	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	8.0 ± 0.1	7.8 ± 0.1	8.0 ± 0.1	8.1 ± 0.1	8.2 ± 0.1
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	20	49 ± 6	41 ± 5	36 ± 5	28 ± 4	28 ± 4
Cadmium	EG005T	1	mg/kg	----	3	<1 ..	<1 ..	<1 ..	<1 ..	<1 ..
Copper	EG005T	5	mg/kg	----	100	54 ± 6	51 ± 6	56 ± 7	56 ± 7	54 ± 6
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	139 ± 14	144 ± 14	160 ± 16	161 ± 16	160 ± 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	89 ± 10	88 ± 10	92 ± 10	100 ± 11	101 ± 11
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	1	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1	<1.0 ..	<1.0 ..	1.0 ± 0.2	1.2 ± 0.2	1.1 ± 0.2
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	50	<5 ..	<5 ..	<5 ..	<5 ..	<5 ..
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	450	210 ± 40	210 ± 40	240 ± 40	210 ± 40	290 ± 50
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..	<0.1 ..
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	1	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..	<0.2 ..
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..	<0.50 ..
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..	<1.00 ..
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS	S_Duplicate_ALS	S_Triplicate_ALS	S_Primary_ALS	S_Duplicate_ALS
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-006 MU	EM2209669-007 MU	EM2209669-008 MU	EM2209669-009 MU	EM2209669-010 MU
EP075A: Phenolic Compounds (Non-halogenated) - Continued										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..	<0.5 ..
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..	<0.10 ..
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 ..	<20 ..	<20 ..	<20 ..	<20 ..
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 ..	<50 ..	<50 ..	<50 ..	<50 ..



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS DI	S_Primary_ALS DI	S_Duplicate_ALS DI	S_Triplicate_ALS DI	S_Primary_ALS DI
				Lower Limit	Upper Limit	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-013 MU	EM2209669-014 MU	EM2209669-015 MU	EM2209669-016 MU	EM2209669-017 MU
EA001: pH in soil using 0.01M CaCl2 extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220	SX_OB_20220
				Guideline	Guideline	525_14_00_S	525_14_02_S	525_14_04_S	525_14_22_S	525_14_24_S
						S_Primary_ALS DI	S_Primary_ALS DI	S_Duplicate_ALS DI	S_Triplicate_ALS DI	S_Primary_ALS DI
				Lower Limit	Upper Limit	25-May-2022 14:00	25-May-2022 14:02	25-May-2022 14:04	25-May-2022 14:22	25-May-2022 14:24
						EM2209669-013 MU	EM2209669-014 MU	EM2209669-015 MU	EM2209669-016 MU	EM2209669-017 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Guideline	Guideline	525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
						S_Primary_ALS DI	S_Duplicate_ALS DI	S_Triplicate_ALS DI	S_Primary_ALS DI	S_Duplicate_ALS DI
				Lower Limit	Upper Limit	25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55
						EM2209669-018 MU	EM2209669-019 MU	EM2209669-020 MU	EM2209669-021 MU	EM2209669-022 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										



Soil Hazard Categorisation and Management

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

Sub-Matrix: SOIL

Compound	Method	LOR	Unit	Sample ID		SX_OB_20220	SX_OB_20220	SX_IB_20220	SX_IB_20220	SX_IB_20220
				Sampling date/time		525_14_26_S	525_14_28_S	525_14_49_S	525_14_52_S	525_14_55_S
				Lower Limit	Upper Limit	S_Primary_ALS DI	S_Duplicate_ALS DI	S_Triplicate_ALS DI	S_Primary_ALS DI	S_Duplicate_ALS DI
				25-May-2022 14:26	25-May-2022 14:28	25-May-2022 14:49	25-May-2022 14:52	25-May-2022 14:55		
				EM2209669-018 MU	EM2209669-019 MU	EM2209669-020 MU	EM2209669-021 MU	EM2209669-022 MU		
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093T): Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										

QUALITY CONTROL REPORT

Work Order	: EM2209669	Page	: 1 of 29
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Josh Alexander
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 25-May-2022
Order number	:	Date Analysis Commenced	: 26-May-2022
C-O-C number	: 20220525162153-ALS-6	Issue Date	: 31-May-2022
Sampler	: BRANDON CLARKE		
Site	: 20220525162153-ALS-6		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 22		
No. of samples analysed	: 22		



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
Xing Lin	Senior Organic Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4362051)									
EM2209668-012	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	5	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	4	4	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	7	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	7	37.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	9	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	49	57	14.8	0% - 50%
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	95	95	0.0	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	158	153	3.0	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	46	45	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	49	48	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	91	86	5.1	0% - 50%

EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4363981)

Page : 3 of 29
 Work Order : EM2209669
 Client : AGON ENVIRONMENTAL PTY LTD
 Project : JC0927



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4363981) - continued									
EM2209471-003	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	4.2	4.3	0.0	0% - 20%
EM2209624-002	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.2	8.2	0.0	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4363982)									
EM2209669-007	SX_OB_20220525_14_28_ SS_Duplicate_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4362779)									
EM2209472-014	Anonymous	EA055: Moisture Content	----	0.1	%	29.5	26.8	9.6	0% - 20%
EM2209624-004	Anonymous	EA055: Moisture Content	----	0.1	%	22.9	23.0	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4362780)									
EM2209669-008	SX_IB_20220525_14_49_S S_Triplicate_ALS	EA055: Moisture Content	----	0.1	%	27.6	26.0	5.9	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4362049)									
EM2209271-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4362029)									
EM2209472-014	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	1.7	1.5	11.4	No Limit
EM2209624-003	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4362030)									
EM2209669-008	SX_IB_20220525_14_49_S S_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	1.0	1.3	24.3	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4362939)									
EM2209542-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	1	1	0.0	No Limit
EM2209666-002	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4362008)									
EM2209472-014	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	200	220	8.8	No Limit
EM2209624-003	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	370	320	14.1	No Limit
EK040T: Fluoride Total (QC Lot: 4362009)									
EM2209669-008	SX_IB_20220525_14_49_S S_Triplicate_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	240	240	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4361472)									
EM2209327-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4360987)									
EM2209669-001	SX_OB_20220525_14_00_ 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



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4360987) - continued									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4360987)									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4360987)									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1,2,2-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: 1,1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit		
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit		
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4361470)									
EM2209327-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4361470) - continued									
EM2209327-001	Anonymous	EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit		
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4361470)									
EM2209327-001	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit		
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<20	<20	0.0	No Limit
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit		
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4361470)									
EM2209327-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4361470) - continued									
EM2209327-001	Anonymous	EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4361470)									
EM2209327-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075I: Organochlorine Pesticides (QC Lot: 4361470) - continued									
EM2209327-001	Anonymous	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
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4360987)									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4361471)									
EM2209327-001	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4361471) - continued									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4360987)									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4361471)									
EM2209327-001	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4360819)									
EM2209252-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4360819)									
EM2209252-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4360819) - continued									
EM2209252-001	Anonymous	EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4360819)									
EM2209252-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4360819) - continued									
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4360819)									
EM2209252-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4360819)									
EM2209252-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2209669-001	SX_OB_20220525_14_00_ SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4365528)									
EM2209669-011	SX_OB_20220525_15_04_ 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



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4365528) - continued									
EM2209669-011	SX_OB_20220525_15_04_ SR_Rinsate_ALS	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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4366431)									
EM2209472-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4366443)									
EM2209669-015	SX_OB_20220525_14_04_ SS_Duplicate_ALS DI	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4365528)									
EM2209669-011	SX_OB_20220525_15_04_ SR_Rinsate_ALS	EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4365528) - continued									
EM2209669-011	SX_OB_20220525_15_04_ SR_Rinsate_ALS	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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4366431)									
EM2209472-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (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
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4366443)	EM2209669-015 SX_OB_20220525_14_04_ SS_Duplicate_ALS DI	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
		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 (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4365528)									
EM2209669-011	SX_OB_20220525_15_04_ 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
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4366431)									
EM2209472-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4366431) - continued									
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4366443)									
EM2209669-015	SX_OB_20220525_14_04_ SS_Duplicate_ALS DI	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4365528)									
EM2209669-011	SX_OB_20220525_15_04_ 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
		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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4366431)									
EM2209472-001	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
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4366431) - continued									
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4366443)									
EM2209669-015	SX_OB_20220525_14_04_ SS_Duplicate_ALS DI	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4365528)									
EM2209669-011	SX_OB_20220525_15_04_ 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
EP231P: PFAS Sums (QC Lot: 4366431)									
EM2209472-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2209669-003	SX_OB_20220525_14_04_ SS_Duplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4366443)									
EM2209669-015	SX_OB_20220525_14_04_ SS_Duplicate_ALS DI	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit



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

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

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4362051)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	98.2	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	65.2	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	96.8	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	90.0	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	89.8	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	81.3	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	92.6	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	83.5	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	96.4	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	75.5	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4364318)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.0	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4364319)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.0	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4363981)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit 7 pH Unit	100 99.8	98.8 99.3	101 101
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4363982)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit 7 pH Unit	100 100	98.8 99.3	101 101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4362049)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	96.9	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4362029)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	83.8	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4362030)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	81.5	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4362939)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	76.1	70.0	130
EK040T: Fluoride Total (QCLot: 4362008)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	102	75.2	110
EK040T: Fluoride Total (QCLot: 4362009)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	104	75.2	110



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4361472)									
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	96.6	67.4	136	
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4360987)									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	97.8	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	99.1	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	93.9	66.6	115	
EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	4.2 mg/kg	92.6	65.2	112	
	106-42-3								
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	94.6	69.4	111	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	93.3	68.4	110	
EP074H: Naphthalene (QCLot: 4360987)									
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	83.0	72.3	114	
EP074I: Volatile Halogenated Compounds (QCLot: 4360987)									
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	84.0	47.0	138	
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	101	57.6	125	
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	102	72.3	115	
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	101	60.5	122	
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	95.2	70.3	112	
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	95.1	66.6	115	
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	91.7	64.4	122	
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	89.8	58.4	127	
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	108	72.9	114	
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	92.8	64.7	115	
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	104	72.6	116	
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	92.4	60.0	119	
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	97.8	71.8	116	
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	103	66.1	116	
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	72.8	39.8	128	
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	95.4	70.3	113	
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	91.2	62.6	113	
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	93.7	70.8	110	
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	90.0	48.4	120	
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4361470)									
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	83.3	74.5	126	
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	79.2	72.7	126	
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	80.4	73.5	132	
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	79.7	72.8	128	
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	80.1	73.3	134	
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	80.1	72.4	128	



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	
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4361470) - continued									
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	78.3	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	89.7	71.9	128	
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	75.8	54.4	135	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4361470)									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	86.4	71.5	130	
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	86.4	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	85.0	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	77.3	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	79.1	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	83.8	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	76.9	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	72.6	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	74.4	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	65.6	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4361470)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	82.0	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	81.5	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	80.4	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	83.0	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	83.1	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	83.5	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	82.4	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	82.8	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	85.8	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	86.0	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	87.9	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	85.8	65.1	130	
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	86.6	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	86.7	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	85.8	71.3	134	
EP075I: Organochlorine Pesticides (QCLot: 4361470)									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	82.6	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	81.1	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	82.7	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	82.5	70.8	130	
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	84.3	76.5	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	
EP075I: Organochlorine Pesticides (QCLot: 4361470) - continued									
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	79.8	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	82.1	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	89.2	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	79.5	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	79.6	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	77.7	69.4	134	
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	82.3	71.0	132	
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	83.5	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	78.4	69.0	143	
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	110	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	83.6	71.4	135	
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	84.1	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	83.5	70.2	135	
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	81.1	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	84.2	63.6	135	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4360987)									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	85.6	61.1	119	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4361471)									
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	111	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	104	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	108	70.0	130	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4360987)									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	84.4	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4361471)									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	112	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	111	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	112	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	111	70.0	130	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4360819)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	98.1	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	93.7	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	72.6	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	105	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	91.5	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	89.3	59.0	134	



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	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4360819)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	94.2	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.0	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.8	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.8	69.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.1	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.3	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.2	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.1	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.7	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	93.2	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4360819)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.8	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	96.6	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	101	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	88.1	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.3	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4360819)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	101	62.0	145	
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	91.2	64.0	140	
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	104	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	113	70.0	130	
EP231P: PFAS Sums (QCLot: 4360819)									
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	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4365528)									
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.444 µg/L	99.9	72.0	130	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4365528) - continued									
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.47 µg/L	83.7	71.0	127	
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.457 µg/L	82.9	68.0	131	
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.477 µg/L	96.2	69.0	134	
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.465 µg/L	96.3	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	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4366431)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	101	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	105	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.3	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.4	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	89.9	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	95.8	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4366443)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	91.7	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	116	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	91.4	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	92.5	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	88.6	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	100	53.0	142	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4365528)									
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	95.9	73.0	129	
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	96.1	72.0	129	
EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.5 µg/L	98.3	72.0	129	
EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.5 µg/L	101	72.0	130	
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	96.8	71.0	133	
EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.5 µg/L	101	69.0	130	
EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.5 µg/L	94.8	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	99.8	72.0	134	
EP231X-INJ: Perfluorotridecanoic acid (PFTriDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	104	65.0	144	
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	115	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366431)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	77.5	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	86.0	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	96.1	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	130	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366431) - continued								
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	90.0	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.5	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	92.1	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	100.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366443)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	92.7	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	81.9	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	98.2	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	97.8	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	101	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	89.9	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	94.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	98.5	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4365528)								
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	98.8	67.0	137
EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	1.25 µg/L	111	68.0	141
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	91.8	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	96.6	70.0	130
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	101	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	96.4	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	102	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366431)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	91.8	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	80.2	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	108	70.0	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
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366431) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	105	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	106	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366443)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	92.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	90.5	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	91.6	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	112	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	117	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	108	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4365528)								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.469 µg/L	108	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	103	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	108	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	108	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4366431)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	107	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	101	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	130	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	117	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4366443)								
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	124	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	105	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	111	70.0	130
EP231P: PFAS Sums (QCLot: 4365528)								
EP231X-INJ: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4366431)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----



Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
						LCS	Low	High
EP231P: PFAS Sums (QCLot: 4366431) - continued								
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4366443)								
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		
EG005(ED093): Total Metals by ICP-AES (QCLot: 4362051)							
EM2209668-013	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	99.9	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	100	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	96.6	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	96.4	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	100.0	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	97.8	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	97.4	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4362049)							
EM2209271-005	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	88.2	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4362029)							
EM2209472-015	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	94.7	58.0	114
EM2209472-015	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	104	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4362030)							
EM2209669-009	SX_IB_20220525_14_52_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	90.9	58.0	114
EM2209669-009	SX_IB_20220525_14_52_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	103	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4362939)							
EM2209542-029	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	95.5	70.0	130
EK040T: Fluoride Total (QCLot: 4362008)							
EM2209472-015	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	74.2	70.0	130
EK040T: Fluoride Total (QCLot: 4362009)							



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EK040T: Fluoride Total (QCLot: 4362009) - continued							
EM2209669-009	SX_IB_20220525_14_52_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	72.2	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4361472)							
EM2209327-006	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	95.3	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4360987)							
EM2209669-002	SX_OB_20220525_14_02_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	119	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	121	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4360987)							
EM2209669-002	SX_OB_20220525_14_02_SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	106	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	107	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	108	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4361470)							
EM2209327-003	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	108	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	109	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	88.4	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4361470)							
EM2209327-003	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	109	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	106	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4361470)							
EM2209327-003	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	103	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	101	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4360987)							
EM2209669-002	SX_OB_20220525_14_02_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	91.0	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4361471)							
EM2209327-005	Anonymous	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	104	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	107	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	98.9	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	104	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4360987)							
EM2209669-002	SX_OB_20220525_14_02_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	88.9	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4361471)							
EM2209327-005	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	109	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	107	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	114	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	107	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4360819)							



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4360819) - continued							
EM2209252-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	100	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	89.7	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	90.9	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	113	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	85.8	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	86.6	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4360819)							
EM2209252-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	101	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	100	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	99.5	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	97.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	101	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	96.5	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	102	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	98.4	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	97.3	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	79.2	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	97.5	69.0	133		
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4360819)							
EM2209252-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	97.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	99.5	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.2	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	98.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	95.2	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	89.6	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	95.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4360819)							
EM2209252-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	105	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	107	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	105	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	114	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
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4365528)							
EM2209669-012	SX_OB_20220525_15_05_SB_Blank_ALS	EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.444 µg/L	105	72.0	130
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.47 µg/L	76.0	71.0	127
		EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.457 µg/L	84.3	68.0	131
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.477 µg/L	89.8	69.0	134
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.465 µg/L	87.6	65.0	140
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.482 µg/L	84.4	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4366431)							
EM2209472-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	115	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	80.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	78.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.4	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	88.3	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	80.3	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4366443)							
EM2209669-016	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	117	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	95.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	95.3	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	104	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	91.9	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4365528)							
EM2209669-012	SX_OB_20220525_15_05_SB_Blank_ALS	EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 µg/L	97.3	73.0	129
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 µg/L	92.3	72.0	129
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 µg/L	96.8	72.0	129
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 µg/L	95.1	72.0	130
		EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 µg/L	95.2	71.0	133
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.5 µg/L	114	69.0	130
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.5 µg/L	91.8	71.0	129
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 µg/L	99.7	69.0	133
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 µg/L	97.8	72.0	134
		EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 µg/L	94.7	65.0	144
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 µg/L	117	71.0	132
		EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366431)					
EM2209472-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	102	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	100	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	98.8	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	102	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.0	71.0	133



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
Laboratory sample ID		Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery(%) MS	Acceptable Limits (%) Low High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366431) - continued							
EM2209472-002	Anonymous	EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	130	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	90.2	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	96.5	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	93.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	116	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4366443)							
EM2209669-016	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	98.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	98.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	105	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	107	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	119	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	104	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.7	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	93.4	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	91.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	106	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4365528)							
EM2209669-012	SX_OB_20220525_15_05_SB_Blank_ALS	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 µg/L	98.8	67.0	137
		EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 µg/L	107	68.0	141
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 µg/L	101	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 µg/L	90.7	70.0	130
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 µg/L	104	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.5 µg/L	96.9	65.0	136
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.5 µg/L	104	61.0	135
		EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366431)					
EM2209472-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	109	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	117	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	96.0	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	98.6	70.0	130



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366431) - continued							
EM2209472-002	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	99.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	96.4	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	107	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4366443)							
EM2209669-016	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	104	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	108	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	76.4	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	94.5	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	93.9	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	88.0	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	95.2	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4365528)							
EM2209669-012	SX_OB_20220525_15_05_SB_Blank_ALS	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.469 µg/L	102	63.0	143
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.476 µg/L	102	64.0	140
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.48 µg/L	116	67.0	138
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.483 µg/L	122	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4366431)							
EM2209472-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	105	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	100	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	106	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	76.3	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4366443)							
EM2209669-016	SX_OB_20220525_14_22_SS_Triplicate_ALS DI	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	103	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	112	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	120	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	87.9	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2209669	Page	: 1 of 13
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 25-May-2022
Site	: 20220525162153-ALS-6	Issue Date	: 31-May-2022
Sampler	: BRANDON CLARKE	No. of samples received	: 22
Order number	:	No. of samples analysed	: 22

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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



Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	01-Jun-2022	✔	27-May-2022	27-May-2022	✔
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	----	----	----	26-May-2022	08-Jun-2022	✔
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	21-Nov-2022	✔	27-May-2022	21-Nov-2022	✔
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	22-Jun-2022	✔	28-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	
EG048: Hexavalent Chromium (Alkaline Digest)								
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	22-Jun-2022	✓	28-May-2022	02-Jun-2022	✓
EK026SF: Total CN by Segmented Flow Analyser								
Soil Glass Jar - Unpreserved (EK026SF) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	30-May-2022	10-Jun-2022	✓
EK040T: Fluoride Total								
Soil Glass Jar - Unpreserved (EK040T) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	22-Jun-2022	✓	30-May-2022	22-Jun-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)								
SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	25-May-2022	27-May-2022	21-Nov-2022	✓	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-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	
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	01-Jun-2022	✓	26-May-2022	01-Jun-2022	✓
EP074H: Naphthalene								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	01-Jun-2022	✓	26-May-2022	01-Jun-2022	✓
EP074I: Volatile Halogenated Compounds								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	01-Jun-2022	✓	26-May-2022	01-Jun-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-Jul-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-Jul-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-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	
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-Jul-2022	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	01-Jun-2022	✓	26-May-2022	01-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-Jul-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	01-Jun-2022	✓	26-May-2022	01-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	27-May-2022	08-Jun-2022	✓	27-May-2022	06-Jul-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	21-Nov-2022	✓	27-May-2022	05-Jul-2022	✓



Matrix: **SOIL**

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

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	21-Nov-2022	✓	27-May-2022	05-Jul-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	21-Nov-2022	✓	27-May-2022	05-Jul-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	21-Nov-2022	✓	27-May-2022	05-Jul-2022	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS	25-May-2022	26-May-2022	21-Nov-2022	✓	27-May-2022	05-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	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X-INJ) SX_OB_20220525_15_04_SR_Rinsate_ALS,	SX_OB_20220525_15_05_SB_Blank_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	28-May-2022	21-Nov-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS, SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS, SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	27-May-2022	28-May-2022	23-Nov-2022	✓	28-May-2022	23-Nov-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X-INJ) SX_OB_20220525_15_04_SR_Rinsate_ALS,	SX_OB_20220525_15_05_SB_Blank_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	28-May-2022	21-Nov-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS, SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS, SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	27-May-2022	28-May-2022	23-Nov-2022	✓	28-May-2022	23-Nov-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X-INJ) SX_OB_20220525_15_04_SR_Rinsate_ALS,	SX_OB_20220525_15_05_SB_Blank_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	28-May-2022	21-Nov-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS, SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS, SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	27-May-2022	28-May-2022	23-Nov-2022	✓	28-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		
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
HDPE (no PTFE) (EP231X-INJ)									
SX_OB_20220525_15_04_SR_Rinsate_ALS,	SX_OB_20220525_15_05_SB_Blank_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	28-May-2022	21-Nov-2022	✓	
HDPE (no PTFE) (EP231X)									
SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS, SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS, SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	27-May-2022	28-May-2022	23-Nov-2022	✓	28-May-2022	23-Nov-2022	✓	
EP231P: PFAS Sums									
HDPE (no PTFE) (EP231X-INJ)									
SX_OB_20220525_15_04_SR_Rinsate_ALS,	SX_OB_20220525_15_05_SB_Blank_ALS	25-May-2022	27-May-2022	21-Nov-2022	✓	28-May-2022	21-Nov-2022	✓	
HDPE (no PTFE) (EP231X)									
SX_OB_20220525_14_00_SS_Primary_ALS, SX_OB_20220525_14_04_SS_Duplicate_ALS, SX_OB_20220525_14_24_SS_Primary_ALS, SX_OB_20220525_14_28_SS_Duplicate_ALS, SX_IB_20220525_14_52_SS_Primary_ALS, SX_OB_20220525_14_00_SS_Primary_ALS - DI, SX_OB_20220525_14_04_SS_Duplicate_ALS - DI, SX_OB_20220525_14_24_SS_Primary_ALS - DI, SX_OB_20220525_14_28_SS_Duplicate_ALS - DI, SX_IB_20220525_14_52_SS_Primary_ALS - DI,	SX_OB_20220525_14_02_SS_Primary_ALS, SX_OB_20220525_14_22_SS_Triplicate_ALS, SX_OB_20220525_14_26_SS_Primary_ALS, SX_IB_20220525_14_49_SS_Triplicate_ALS, SX_IB_20220525_14_55_SS_Duplicate_ALS, SX_OB_20220525_14_02_SS_Primary_ALS - DI, SX_OB_20220525_14_22_SS_Triplicate_ALS - DI, SX_OB_20220525_14_26_SS_Primary_ALS - DI, SX_IB_20220525_14_49_SS_Triplicate_ALS - DI, SX_IB_20220525_14_55_SS_Duplicate_ALS - DI	27-May-2022	28-May-2022	23-Nov-2022	✓	28-May-2022	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	
Analytical Methods							
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	3	23	13.04	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	3	23	13.04	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	3	25	12.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	3	23	13.04	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	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	23	17.39	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	4	25	16.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	23	8.70	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	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	2	28	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	23	8.70	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	23	8.70	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	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Matrix: **SOIL** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reular	Actual	Expected	Evaluation	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	23	17.39	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	23	8.70	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	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	29	10.34	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	29	6.90	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	29	6.90	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	29	6.90	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl ₂ extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl ₂) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).



Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	WATER	In house: Direct injection analysis of fresh waters after dilution (1:1) with mobile phase solvent. Analysis by LC-Electrospray-MS-MS, Negative Mode using MRM. Where commercially available, isotopically labelled analogues of the target analytes are used as internal standards for quantification. Where a labelled analogue is not commercially available, the internal standard with similar chemistry and the closest retention time to the target is used for quantification. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl ₂ extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.



<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.
Preparation for PFAS in water.	EP231-PR	WATER	Method presumes direct injection without workup. Preparation includes addition of internal standard and surrogate, and filtration prior to analysis.